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THE SHIFTING AND INCIDENCE OF TAXATION

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THE SHIFTING AND INCIDENCE OF TAXATION

BY

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PREFACE TO THE THIRD EDITION

In the eleven years that have elapsed since the last edition of this work, the practical problems of finance in various countries have evoked a renewed interest in the problem of the incidence of taxation. Advantage has been taken of the literature that has accompanied this newer interest to bring the discussion, as far as possible, down to date. The inclusion of the new matter has necessitated a considerable addition to the bulk of the work, although it has involved no substantial changes in the doctrine itself.

In Part One, devoted to the history of the theory, attention has been called to some interesting writers, especially of the seventeenth and eighteenth centuries, who were overlooked in the previous editions. It is hoped that this historical part will now be found fairly complete, at all events so far as English literature is concerned.

With reference to the substantive part of the doctrine of incidence, the chief alterations and additions are the following: The introduction to the whole volume has been considerably enlarged and completely rewritten. An attempt has been made to clarify the discussion of the tax on agricultural land by calling attention to considerations of practical moment. The chapter on city real estate taxes has been virtually rewritten, in view of the growing significance of local finance. In chapter four a fuller discussion of the mortgage tax is inserted, and in chapter seven special atten-

tion is paid to the newer stock and produce-exchange taxes. Moreover, in almost every chapter there will be found additions involving references to the more recent discussions, and also taking up some newer points which had been omitted in the preceding edition.

EDWIN R. A. SELIGMAN.

COLUMBIA UNIVERSITY,
November, 1909.

PREFACE TO THE FOURTH EDITION

ALTHOUGH eleven years have again rolled by, the contributions that have been made to the subject in the interval have been so comparatively slight as to necessitate only moderate changes in this new edition. The stirring events of the last decade have furnished material rather for study of the general effects of taxation than for that of incidence. Apart from the fuller utilization of the older literature, which will be found scattered through this edition (esp. pp. 29, 65, 67, 72, 78, 84, 88, 94, 100, 104, 175, 180, 351, and 354) the chief alterations will be found in connection with the topics of capitalization (pp. 183, 200, 218, 223, and 286), and the incidence of taxes on profits and surplus (pp. 362 and 393).

E. R. A. S.

COLUMBIA UNIVERSITY,
February, 1921.

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INTRODUCTION

THE problem of the incidence of taxation is one of the most neglected, as it is one of the most complicated, subjects in economic science. It has indeed been treated by many writers; but its discussion in scientific literature, as well as in everyday life, has frequently been marked by what Parieu calls the "simplicity of ignorance." Yet no topic in public finance is more important; for, in every system of taxation, the cardinal point is its influence on the community. Without a correct analysis of the incidence of a tax, no proper opinion can be formed as to its actual effect or its justice. It is, therefore, time for an attempt to be made not only to pass in review the theories hitherto advanced, but to contribute to the solution of some of the theoretic problems while paying special attention to the practical aspects of the discussion.

A word first as to the terminology. In the process of taxing, we must distinguish three conceptions. First, a tax may be imposed on some person; secondly, it may be transferred by him to a second person; thirdly, it may be ultimately borne by this second person or transferred to others by whom it is finally assumed. Thus the person who originally pays the tax may not be the one who bears its burden in last instance. The process of the transfer of a tax is known as the *shifting* of the tax, while the settlement of the burden on the ultimate taxpayer is called the *incidence* of the tax. The incidence of the tax is therefore the result of the shifting, and the real economic problem lies in the nature of the shiftings.

The English fiscal language is somewhat deficient in its nomenclature. While *incidence* conveys to the mind the notion of the ultimate result of the shifting, we have no word in common use to express the immediate result of the

original imposition of the tax. "Assessment" of the tax looks upon the process from above downward; but what we need is a term to characterize the process as seen from below upward. The French and the Italians have the words *percussion, percussione,* to express this idea of the primary result of the assessment. They, therefore, logically term the shifting of the tax the *repercussion*[1] of taxation, the ultimate result of which is the incidence (*incidence, incidenza*).

The English term which best expresses this idea is "impact." We occasionally speak of a tax "impinging" on somebody or something, so that the "impact" of a tax would denote the act of impinging. Moreover, we ordinarily refer to the impact of a projectile in this very sense. The impact of a tax is therefore the immediate result of the imposition of a tax on the person who pays it in first instance. It corresponds to what is often, but erroneously, called the "original incidence" or the "primary incidence" of a tax. There is but one kind of incidence, namely the ultimate incidence, which emerges only when the tax finally settles, or comes to rest, on the person who bears it. We thus have the three distinct conceptions — the impact, the shifting, and the incidence of a tax, which correspond respectively to the imposition, the transfer, and the settling, or coming to rest, of the tax. The impact is the initial phenomenon, the shifting is the intermediate process, the incidence is the result. To confuse the impact with the incidence is as reprehensible as to confound the incidence with the shifting.

Strictly speaking, the impact of a tax includes not only the immediate result of the original imposition, but also the subsequent impinging of a tax on a person who is not the tax-bearer. Thus if a tax is imposed on A, shifted to B, and then again shifted to C, who finally bears the tax, we can properly speak of the impact of the tax first on A and then on B. The impact is transferred or repeated. It is only when

[1] They also use the words *translation, traslazione,* which are the same as our "transference" or "shifting." The French also speak of taxes being "*rejetés,*" our "thrown off" or "shifted."

the taxpayer is at the same time the tax-bearer that the impact is immediately followed by, or converted into, the incidence. For a similar reason, when the initial taxpayer is also the tax-bearer, the impact of the tax is at once followed by the incidence, without any intermediate process of shifting. But in all cases incidence signifies the result, while shifting, if there is any, denotes the process.

The point to be emphasized is that through the process of shifting, the taxpayer escapes the burden of the tax. There are, however, other methods of escape, which must not be confused with shifting. It is here that both the analysis and the nomenclature of the subject have been exceedingly defective.[1] Let us endeavor to clear up the matter and to suggest what may possibly be deemed worthy of acceptance as the definitive nomenclature.

Whenever there is a shifting of taxation, the tax may be shifted forward or backward. Thus a producer, upon whom a tax has been assessed, may shift it to the consumer, or a seller may shift it to the purchaser. The tax is shifted forward to the consumer or the purchaser respectively. On the other hand, the tax may be imposed in first instance on the consumer or the purchaser, and may be shifted by him to the producer or the vendor respectively. In this case the tax is shifted backward. Finally, when the tax is shifted from the seller to an intermediate purchaser, who then sells to another person, and so on until the tax finally settles on the ultimate purchaser or consumer, we speak of the tax being shifted onward. Taxes, therefore, may be shifted forward, backward, or onward.[2]

[1] The English and the French writers have done virtually nothing to clear up the confusion. The Germans have done a little, but only a little. More has been accomplished by the Italians, especially by Maffeo Pantaleoni, *Teoria della Traslazione dei Tributi*, 1882, and more recently by Fabrizio Natoli, *Studi su gli Effetti Economici dell' Imposta*, 1909. But their analysis also is, as we shall see, not entirely free from objection.

[2] The Germans, since the time of von Hock, in 1863, have been accustomed to these conceptions, which they designate by the terms *Fortwälzung*, *Rückwälzung*, and *Weiterwälzung*, — all of them subdivisions of shifting or *Ueberwälzung*.

To be contrasted, in part at all events, with the shifting of taxation is the capitalization or the amortization of taxation. The chief feature of this phenomenon, which will be fully discussed later,[1] is the fact that under certain circumstances the purchaser of a taxable object, by cutting down the purchase price, discounts all the taxes which he may be called upon to pay in the future. If, for instance, the ordinary return on investments in securities is five per cent and a tax of one per cent is imposed on a particular kind of corporate bonds selling at par, the price of these bonds will fall from par to eighty. The tax will be amortized or discounted through a depreciation of the capital value of the bonds by a sum equal to the capitalized value of the tax. The new purchaser thus escapes the tax which he is compelled to pay to the government by giving so much less for the bonds.

The few writers who have discussed this phenomenon generally consider capitalization to be a kind of shifting. In a certain sense, indeed, there is a seeming justification for this view. For the purchaser escapes the tax by throwing it off, or shifting it backward, on the seller. In reality, however, a distinction ought to be observed between shifting and capitalization. Shifting implies a process applicable to a single tax or to a tax each time that it is imposed; capitalization implies a process applicable to a whole series of taxes and takes place *before* any of them, with the exception of the first, is paid. In the case of a dealer who shifts a tax on a commodity back to the producer, the process takes place each time that the tax is levied, and the producer reduces the selling price each time by the amount of the tax. In the case of capitalization the purchaser indeed pays the tax, but the initial possessor or vendor reduces the price by a sum equal to all the future taxes which the purchaser expects to be called upon to pay. In the one case we have the shifting back of a single tax; in the other case we have the throwing back of a whole series of taxes at once. For capitalization implies a change in price equal to the capital value of all anticipated payments.

[1] Part II, chap. i, § 1.

There is, therefore, a marked distinction between shifting and capitalization. If a tax is shifted, it cannot be capitalized; if a tax is capitalized, it cannot be shifted. A tax on houses, for instance, as we shall see later, if imposed on the tenant, may possibly be shifted back to the owner, but cannot be capitalized; a tax on land, imposed on the tenant, may be capitalized without being shifted to the present owner. Shifting and capitalization are in reality opposite, not complementary, conceptions.

In the case of both shifting and capitalization, however, the taxpayer escapes the burden of the tax through the mediation of the process of exchange. Without the purchase and the sale of the commodity there can be neither shifting nor capitalization. There is, however, a third method of escape possible, which is based not upon exchange, but upon production. Let us take, for instance, the case of a tax imposed either upon a finished commodity or upon the process of producing the commodity. It is possible, under certain circumstances, that the producer, fearing the loss of his market if he should add the tax to the price, will pay the tax and endeavor to recoup himself by so improving the process of production as to succeed in turning out his units of product at a lower cost. In such a case the loss occasioned by the tax may be offset, or perhaps even more than offset, by the gains resulting from the economies of production.

What shall we call such a phenomenon? The Germans term it the "throwing-off" (*Abwälzung*), while the Italians call it the "rejection" or the "removal" of the tax.[1] All these terms, however, are ill-chosen, because there is nothing distinctive in them. If a tax is shifted, it is also thrown off or removed from the taxpayer. We venture, therefore, to suggest for this phenomenon the term "transformation of taxation." For by virtue of its operation the loss due to the tax is,

[1] The term *Abwälzung* is found first in von Hock, *Die öffentlichen Abgaben und Schulden*, 1863, although the phenomenon itself had previously been described by Rau. Pantaleoni, *op. cit.*, p. 28, calls it *rigetto dell' imposta;* Natoli, *op. cit.*, p. 22, calls it *remozione dell' imposta;* Tenerelli, *L' Azione delle Imposte Indirette sui consumi*, 1898, p. 67, calls it *rimozione dell' imposta.*

or may be, transformed into a gain: the tax is transformed into its opposite. The attribute of removal or throwing-off ("rejection") of the tax is common to all three methods of escape — shifting, capitalization, and transformation; but the attribute of the conversion of loss into gain is found only in the case of transformation.

Whether there is any such phenomenon as the transformation of taxation has sometimes been questioned. The discussion is at least as old as the time of Hume, and has usually been associated with the query as to whether taxes can act as a spur to industry. As a broad generalization, the assertion is indeed open to grave doubt, for taxes on industry must indubitably be regarded on the whole as a drag or burden on industry, rather than as a spur to industry. But while it is doubtless true that under a régime of free competition the quest for profits will impel the individual to make the best use of his opportunities, it is none the less a fact that there have frequently been cases where the attention of the producer was first directed to the possibility of improving the productive process by some new burden which started a whole branch of industry out of its comparative lethargy and caused it to forsake the old rut. Take, for instance, the familiar example of the eighteenth-century Scotch tax on the whiskey distillery which led to such improvements in the process that for a time at least the distillers succeeded in transforming the loss into a gain; or the case of the European continental tax on beet sugar in the nineteenth century, the burden of which admittedly first directed the attention of the producers to the possibility of reducing the cost of extracting the sugar from the beets. It may be true that the improvements would probably have come about of themselves after a time; but this does not invalidate the accuracy of the contention that a tax may be the occasion, even if it be not the cause, of a betterment in production. Whenever we find such a phenomenon, we are in the presence of the transformation of a tax — the transformation from loss into possible gain.

The literature of finance, however, has thus far failed to

put the transformation of taxation into its proper place. Some writers confuse transformation with shifting,[1] whereas, as we are now aware, the two conceptions are entirely distinct. In the case of shifting, the tax is thrown off the taxpayer and settles upon the final tax-bearer. The incidence is on some one else than the original taxpayer. In the case of transformation, on the contrary, the incidence is on the original taxpayer. He escapes, not by a shifting of the tax, but by a transformation of the tax. Transformation depends upon incidence and is a reaction from the incidence. If there is no incidence, there can be no transformation. But if there is a shifting, there can obviously be no incidence on the original taxpayer. Transformation and shifting are hence opposites.

Others, again, confuse transformation with evasion of taxation.[2] This phenomenon, however, as will be seen immediately below, is something entirely different. Others finally seek unduly to extend the sphere of transformation, and include under this phenomenon not only economies through improvements in production, but also savings through changes in consumption,[3] which, as we shall see, properly come under a quite distinct head.

[1] This is true especially of the Germans. Although von Hock was, as stated above, the first to speak of *Abwälzung*, subsequent writers used this as a general term synonymous with *Ueberwälzung*. So, *e.g.*, Rau, and Prince-Smith in his essay "Ueber die Abwälzung" in the *Vierteljahrschrift für Volkswirthschaft und Kulturgeschichte*, vol. xiii (1866). Held, in his article "Zur Lehre von der Ueberwälzung der Steuern" in the *Zeitschrift für die gesamte Staatswissenschaft*, 1868, pp. 489 and 492, first called attention to the fact that transformation is really not shifting, but he did not designate transformation by the term *Abwälzung*, which, on the contrary, he continually employed as synonymous with *Ueberwälzung*. See, *e.g.*, *op. cit.*, p. 481, and Part I, book ii, chap. 6, of this monograph. Wagner clearly describes the phenomenon of transformation, which he calls *Abwälzung*, but he considers it one of the two forms of *Ueberwälzung* or shifting, the other being what he terms *Weiterwälzung*. See his *Finanzwissenschaft*, II^er Theil (1880), § 331, p. 154. The same is true of the later editions. The more recent German writers employ the terms in all degrees of confusion, none of them making the correct distinction.

[2] This is true, *e.g.*, of Wicksell, *Finanztheoretische Untersuchungen*, 1896, p. 12. It must also be confessed that in the earlier editions of this book the distinction was not adequately observed.

[3] This error, *e.g.*, is committed by Pantaleoni, *op.cit.*, p. 25.

The transformation of taxation is therefore a method of escape from taxation which must be classed with shifting and capitalization. Shifting is the most common, capitalization somewhat less usual, transformation rather infrequent. While shifting and capitalization are, as we have learned, separate and even opposite phenomena, both shifting and capitalization possess two attributes which differentiate them from transformation. These are the means of escape and the result. In shifting and capitalization the escape from taxation takes place through the medium of exchange of commodities; in transformation through the medium of production. In shifting and capitalization the taxpayer may escape the burden, but can never receive a benefit; in transformation the taxpayer may not only escape, but may have his loss transformed into a gain.

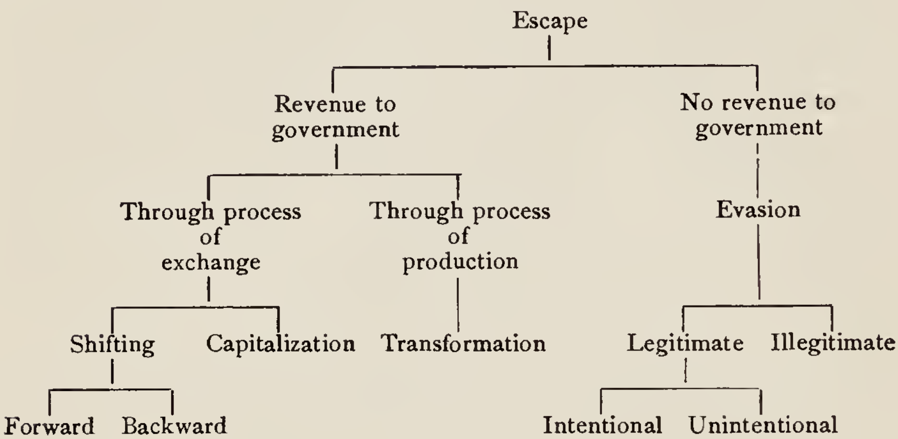
While shifting, capitalization, and transformation of taxation are three forms of escape from taxation, they are not the only forms. There remains, in fact, one more method of escape from taxation which is even more common than any of those hitherto mentioned—namely, the evasion of taxation. In each of the three methods of escape thus far discussed the government has always received a revenue, whatever may have been the facts as to the taxpayer. Whether the tax be shifted, capitalized, or transformed, it has always been paid by some one. Even in the case of transformation the tax is paid by the producer, and it is of no fiscal concern to the government whether the loss of the producer due to the payment of the tax is transformed into a gain.

In the case of evasion, however, not only does the taxpayer escape the tax, but the government loses its revenue. Evasion of the tax takes place only when there are no proceeds. If the tax is evaded in part, there are no proceeds as to the part which is evaded. Evasion of taxation is tantamount, fiscally speaking, to the absence of taxation. So far as the revenue of the government is concerned, there might as well be no tax. In all other forms of escape from taxation the government still receives its due.

Evasion of taxation assumes several forms — the most important categories being legitimate and illegitimate evasion. The conception of illegitimate evasion is simple. It consists of failure of the legal taxpayer to conform to the provisions of the law. He may be a smuggler, or a "tax-dodger," or may indulge in any one of a variety of other shifts. In every case, however, his gain is the government's loss. On the other hand, the evasion may be legitimate, that is, in accordance with law. Legitimate evasion can take place only when the individual escapes the tax by refraining from the consumption of the commodity. Without a diminution of consumption there can be no legitimate evasion. Legitimate evasion, moreover, differs according as it is intended or not intended. Intentional evasion takes place when the legislator expressly desires that the tax be not paid. The object of the tax in such a case is not fiscal, but social. Thus in the case of the American tax on opium or on state bank-notes the purpose of the law is to cause the individual to refrain from using opium or emitting bank-notes. The same would be true of a high tariff. To the extent that the tariff checks, or even prohibits, imports, the tax is not paid and the purpose of the law is thus achieved. On the other hand, the legislator may desire to have the tax paid, but the imposition or the increase of the tax may engender an unexpected and entirely unwelcome falling off of consumption, thus leading to a decrease, or even to the entire disappearance, of any revenue to the treasury. Such cases have been frequent in the excise legislation of all countries. Sometimes, however, we have a combination of legitimate and illegitimate evasion, although, of course, the legitimate evasion which is thus combined must be of the unintentional type. For manifestly if the government desires that the tax be not paid, non-payment is not in conflict with the law. A good illustration of such a combination of illegitimate and legitimate unintentional evasion is afforded by the experience of the American government with the whiskey tax during the Civil War period, the sudden jump of the tax from fifty cents to two dollars a gallon causing not

only a great falling off in consumption, but also a marked increase in frauds on the revenue.

If we sum up the preceding discussion, we can portray the various categories of escape from taxation in the following table: —



Of all these forms of escape from taxation, shifting is the really important one. Evasion of taxation is so simple that it needs little elucidation; transformation of taxation is so infrequent as to call for only slight consideration; capitalization of taxation is so closely allied to shifting that it can best be treated in connection with it. In the process that intervenes between the impact and the incidence of taxation, shifting is thus really the phenomenon that calls for an extended study.

In addition to the confusion that has been brought about by the failure to distinguish between shifting and the other forms of escape from taxation, we find another fertile source of error in the failure to distinguish between the shifting of a tax and the incidental burden which may rest on the shifter. When we consider, for instance, the shifting of a tax as between buyer and seller, or between producer and consumer, the question that concerns us is: Will the price of the article be raised by the imposition of the tax? If the

price is raised, we say that the tax is to that extent shifted. But even a complete shifting of the tax does not necessarily mean an entire absence of loss to the seller. Thus, it usually happens that an increase of the price of a commodity leads to a decrease in sales; and it may happen that these decreased sales, even at higher prices, will yield less total profits than before. In such a case, not only does the buyer pay the tax, but the seller also suffers a loss, even though the tax has been shifted completely.

These incidental burdens may be summed up under the head of pressure of taxation. We should thus have a fourth category to add to the original three mentioned above on page 2. In tracing the life history of a tax, in other words, it might seem that we should have to distinguish between (1) the impact, (2) the shifting (and other forms of escape), (3) the incidence, and (4) the pressure of taxation. In reality, however, the pressure of taxation is not simply a consequence of the incidence, but may be connected with any of the preceding stages.[1] There may be a pressure or incidental burden resulting from the impact and from the shifting or other forms of escape, as well as from the incidence. And the pressure may be felt not only by those who pay, but by those who do not pay.

That there is a distinction between the incidence of a tax and the pressure of the incidence is obvious. The incidence of a tax marks the final payment by the tax-bearer. Ordinarily, the burden upon the tax-bearer is equal to, or measured by, the amount of the tax which he is called upon to pay. But, as we shall see later, there are cases where the producer may be able, as the consequence of a tax, to raise the price of the commodity not only by the amount of the tax, but by something more than this amount In such a case, not only is the incidence of the tax upon the consumer, but the burden resting on the consumer is greater than the amount of the tax. The loss to the tax-bearer outweighs the gain to the

[1] As has been pointed out by Natoli, *op. cit.*, in his criticism of Pantaleoni.

treasury. The pressure of incidence includes this extra loss.[1]

The pressure of the impact of a tax may be typified by the illustration mentioned in the last paragraph but two. The producer may shift the tax entirely, and yet his restricted sales may lead to lower profits. This decrease of profit represents the pressure of the impact, which is not neutralized by the shifting of the tax. Conversely, if the tax is originally imposed upon and borne by the consumer, the loss possibly resulting to the producer through the decrease of sales represents the reaction on the producer of the pressure of the impact on the consumer. Again, if the producer who has paid the tax were able for some reason to shift to the consumer only the exact amount of the tax, not including the interest on the amount paid out, this interest lost by the producer would represent the pressure of the impact.[2]

The pressure connected with the process of escape from taxation can be well illustrated in the case of evasion. If a tax imposed on a commodity enhances its price by the amount of the tax, it is possible, and in ordinary cases even likely, that, whether the tax impinges on the consumer directly or through shifting, the consumer will restrict his consumption. He may even be led to abandon the consumption entirely. If this occurs, he, of course, pays no tax, but evades it. Yet in so far as he is compelled to resort to an inferior substitute, or to suffer the complete deprivation of the satisfaction of his want, he undoubtedly undergoes a loss. This is not a pressure of incidence, because, since he pays no tax, there is no incidence; it is

[1] Professor Adams, *Science of Finance*, p. 388, seems to overlook this when he says: "Manifestly there can be no payment by a citizen unless there is a corresponding receipt by the government." Professor Bastable, while avoiding this mistake, errs in including this extra loss under the head of incidence, rather than of pressure of incidence. *Public Finance*, 3d ed., 1903, p. 361.

[2] Pantaleoni, *op. cit.*, p. 21, is in error in characterizing this payment of interest as a partial incidence upon the producer. As Natoli well points out, *op. cit.*, p. 37, there can be no incidence without a corresponding revenue to the treasury.

a pressure of evasion. The burden of a tax may thus be felt by those who do not pay, as well as by those who do. In fact, as has been well said, "persons who pay a tax are often less injured by its imposition than those who pay no portion of it. The man who goes two miles out of his way daily to avoid a bridge toll would be more benefited by the freeing of the bridge than most of us who pay the toll." [1]

This consideration has led the writer just quoted to suggest the entire dropping of the term "incidence of taxation" and the substitution in its stead of "effects of taxation." [2] The suggestion, however, has very properly met with no favor whatsoever.[3] By effects of taxation we may mean two things.

[1] Edwin Cannan in *Memoranda chiefly relating to the Classification and Incidence of Imperial and Local Taxation*, of the *Royal Commission on Taxation*, 1899, p. 166.

[2] "I have no doubt that it is desirable to eschew the use of the term 'incidence of taxation.' It unduly restricts inquiries into the justice and expediency of taxes, since it is always held that the 'real incidence' of a tax is upon the persons who ultimately pay or provide the money for a tax. . . . It is therefore far better to consider the *effects* of taxation." Cannan, *op. cit., ibid.*

[3] The only writer who seems to lean toward the suggestion is Edgeworth, who begins his series of articles on "The Incidence of Urban Rates" in the *Economic Journal*, vol. x (1900), p. 172 with the words: "Incidence here denotes all those effects of taxation with which the economist is concerned." Yet on p. 132 of the *Memoranda* mentioned in the preceding note Professor Edgeworth quotes with seeming approbation the doubt that has been raised as to whether "an effect of this sort — detrimental to a certain class, without any corresponding benefit to the exchequer — can properly be described as the *incidence* of a tax." Yet surely it is an effect "with which the economist is concerned." On the other hand Bastable thinks that "the expression is far too well established, and also far too convenient to be thus summarily abandoned." *Public Finance*, 3d ed., 1903, p. 361. Natoli says that the "remedy, as everyone can see, is worse than the evil. Once that we have reached the point of separating the phenomena into the effects of incidence and into other effects, not perhaps well designated, but clearly not the effects of incidence, it is taking a step backward to chaos to catalogue every possible effect under a rubric with no precise content whatever." *Op. cit.*, p. 311. Finally, as Row-Fogo says, "the term 'effects' is itself open to objection. Rates may have the effect of injuring the health and morals of occupiers. . . . If 'effects' is to supersede 'incidence,' the term will have to be defined more closely. . . . 'Effect' includes anything." — J. Row-Fogo, *An Essay on the Reform of Local Taxation in England*, 1902, p. 127, note and p. 131.

In the narrower sense, it denotes the immediate consequence of each of the above-mentioned steps. Thus shifting is an effect of impact, incidence is an effect of shifting, and the pressure of a tax is an effect, in turn, of the impact and of the shifting as well as of the incidence. In the wider sense, effect denotes any of the subsequent results of taxation. A tax may have a great many effects. It may diminish industry and impoverish individuals; it may stimulate production and enrich individuals; it may be an unmitigated curse to society; it may be a necessary evil; it may be an unqualified boon to the community regarded as a whole.

These problems are indeed important. They can, however, not be successfully attacked unless we previously solve the question of shifting and incidence. Scientific progress can be made only by a continually closer analysis and finer classification. To discuss nothing but the "effects" of taxation in general would be to render abortive the entire analysis which has been attempted in the preceding pages. This analysis has led us to the conclusion that the problem *par excellence* is that of shifting and incidence. With the wider questions of the general effects of taxation the student of incidence does not primarily busy himself. What he has particularly to investigate is the question: On whom does the tax ultimately fall? When we once know this, we can then proceed to the further discussion of the effects produced by the pressure of taxation on the various classes or individuals. The shifting is the process; the incidence is the result; the changes in the distribution of wealth are the effect.

The discussion of incidence thus depends largely on the investigation of the shifting of taxation. The real problem before us is to ascertain the conditions according to which a tax is shifted forward, backward, or not at all. Only when we understand whither, why, and how a tax is shifted, can we discover its actual incidence; and it is only when we have ascertained the incidence that we can proceed to discuss the wider effects of a tax. In the following pages an attempt will accordingly be made to attack the problem by first

giving a detailed critical history of the doctrine of shifting and incidence, and then taking up the positive theory itself. In the second part, which deals with the constructive doctrine in its most recent aspects, it will be convenient to begin with a statement of some general principles, to follow this with a consideration of the chief separate taxes, one by one, and to close by drawing the general conclusions applicable to the science of finance.

PART I

THE HISTORY OF THE DOCTRINE OF INCIDENCE

GENERAL SURVEY

THE writers on the shifting and incidence of taxation,[1] like those on almost all other economic topics, may be broadly divided into two classes, marked off from each other by the period in which the theory of distribution was formulated by the Physiocrats and Adam Smith. The doctrine enunciated by the first class of writers — almost exclusively English — may be summed up under the head of "The Early Theories."

The English literature on taxation, prior to Adam Smith, begins at about the middle of the seventeenth century. For somewhat more than a hundred years, the theories on the incidence of taxation are found, with a few important exceptions, in occasional pamphlets written to advocate or to oppose practical measures of reform. It was not until a few decades before Adam Smith that a consideration of the general theory of incidence assumed a more prominent place in the treatises on economic topics. The propositions of the statesmen as well as of the pamphleteers of the earlier period rest, however, on more or less definite theories of incidence.

[1] The only works which contain a history of the theory of incidence are the German works of J. Kaizl, *Die Lehre von der Ueberwälzung der Steuern*, 1882, and G. v. Falck, *Kritische Rückblicke auf die Entwickelung der Lehre von der Steuerüberwälzung seit Adam Smith*, 1882. Both these works deal only with the modern theories, and even for this period they are inadequate. Whole classes of authors are omitted, among them some important ones. Each work is chronological, and makes little attempt to analyze the theories according to schools. Falck is richer in the account of the early German writers. Kaizl is better acquainted with several of the French authors, although he omits some of the most noteworthy. Both neglect the English authors, with the exception of Smith, Ricardo and Mill, and ignore the Continental and American writers. Falck is almost without any positive ideas at all, while Kaizl adheres so closely to one or two German predecessors that his own constructive work is slight. Both books are, however, to be recommended as the only ones that we possess on the subject. The abler work, originally written as a doctor's dissertation, is that of Dr. Kaizl, who subsequently attained a prominent position as professor in the University of Prague and as author of numerous economic treatises in Bohemian, and who at one time occupied the post of Minister of Finance in the Austro-Hungarian monarchy.

It may conduce to clearness to classify these pioneers according to their practical inferences from the doctrine of incidence. From this point of view, the writers before Adam Smith may be divided into six categories, as follows: —

1. Those who discuss the general excise.
2. Those who favor a single tax on luxuries.[1]
3. Those who favor a single tax on houses.
4. Those who favor a general property tax.
5. Those who favor a single tax on land.
6. Those who favor a more eclectic system.

This whole field of economic inquiry has thus far been so little cultivated, and many of the works referred to are now so rare that it may be wise to treat this section of the history more fully than would otherwise be permissible in a work which pretends to give only a general sketch of the historical development of the doctrine of incidence.

The views developed in the period subsequent to the Physiocrats and Adam Smith, which will be discussed in Book II. under the title of "The Modern Doctrines," are somewhat more difficult to subdivide with accuracy; for it is not always easy to draw the line sharply between writers many of whom have much in common. Nevertheless, their theories of the incidence of taxation may be conveniently classified as follows: —

1. The Physiocratic theory.
2. The Absolute theory.
3. The Diffusion theory.
   (*a*) The Optimistic theory.
   (*b*) The Pessimistic theory.
4. The Capitalization theory.
5. The Eclectic theory.
6. The Agnostic theory.
7. The Socialistic theory.
8. The Quantitative or Mathematical theory.

[1] The word "single" is not here used in opposition to "double." The phrase denotes a general tax on luxuries as the exclusive tax.

BOOK I

THE EARLY THEORIES

CHAPTER I

Those who discuss the General Excise

By the term "excise" is meant a tax on commodities, levied on the producer or the domestic dealer. It is distinct from customs duties which are levied on the importer; although, after commodities have once been imported, an internal duty or excise may also be levied on them. These internal taxes or excises are popularly supposed to be shifted to the consumer and, accordingly, while they are imposed in first instance on the producer or dealer they are commonly classed as indirect taxes on consumption. The English publicists, however, were by no means unanimous in accepting this popular view. We may, in fact, distinguish no less than four different theories as to the incidence of the excise. These theories are: —

1. That, while the excise is at first shifted from the dealers to the consumers, it will not finally rest on the poor consumers.
2. That the excise will rest on consumers in general.
3. That the excise will be shifted to the landowners.
4. That the excise will finally rest on the dealers or traders.

The earliest writers to propose a system of excises did not look much farther than the surface fact that the excise was a tax on a consumable commodity, and therefore presumably a tax on consumption. Their ideal was a tax on expenditure, and this ideal, in their opinion, could be most easily attained by a general excise. Although this project was a favorite one with many of the early authors, it gradually met with opponents as well as with adherents until, under Walpole, it

became, in the second quarter of the eighteenth century, the subject of a fierce controversy.[1]

The first English writer to posit expenditure as the basis of taxation was Hobbes, in a work written shortly after the imposition of the first excise in 1643. Hobbes, like many of the later continental tax reformers, held a tax on expense to be a logical corollary of the doctrines of equality and universality of taxation. To tax property, he thought, would be to discourage thrift and to put a premium on extravagance; while, since everybody consumes something, a tax on expense cannot possibly be evaded like so many of the other taxes.[2] The scheme of the excise itself was soon adopted by several writers. Thus Cradock states that "the Generall Excise (so much decryed and Petitioned against) in its proper Constitution, is the most equitable of Impossitions: no man being charged with it, but he that sels it for profit, to the consumption of the Commodity, who in truth pays it

[1] Those who care to go into the literary history of the controversy over th famous "excise-scheme," which was in reality no scheme for a general excise at all, are referred to the monographs of Leser, *Ein Accisestreit in England*, Heidelberg, 1875, and of Ricca-Salerno, *Le dottrine finanziarie in Inghilterra tra la fine del secolo XVII e la prima meta del XVIII*, Bologna, 1888. A list of additional contemporary pamphlets may be found in the bibliography printed by Sinclair, *History of the Public Revenue of the British Empire*, 3d ed., 1804, vol. iii, appendix, pp. 94–136. Many of the monographs discussed by Leser and Ricca-Salerno do not dwell on the question of incidence. So far as they do discuss the subject, they, as well as other works of the same period not mentioned by the German and Italian writers, will be considered in the following pages.

[2] "The Equality of Imposition consisteth rather in the Equality of that which is consumed, than of the riches of the persons that consume the same. For what reason is there, that he which laboureth much, and sparing the fruits of his labour, consumeth little, should be more charged, then he that living idlely, getteth little, and spendeth all he gets; seeing the one hath no more protection from the Common-wealth then the other? But when the Impositions are layd upon those things which men consume, every man payeth Equally for what he useth: Nor is the Common-wealth defrauded, by the luxurious waste of private men."—*Leviathan, or the Matter, Forme, and Power of a Common-wealth Ecclesiasticall and Civill.* By Thomas Hobbes of Malmesbury, London, 1651, chap. 30, part 2, p. 181 (reprint of 1881, p. 270). For a fuller statement of the benefit theory of taxation on which this passage is based, see Seligman, *Progressive Taxation in Theory and Practice*, 2d ed., 1908, pp. 150–157.

insensibly without Complaint."[1] Another writer in speaking of the Dutch excise regards it as "certainly the most equal and indifferent tax in the world, and least prejudicial to any people."[2] So familiar indeed did the system become that Culpeper was able to state: "It hath alwayes been a received Maxim, That our meer Consumption can scarce be too heavily excised."[3] And in another passage he remarks that: "Domestick Excise in a thriving State hath no fellow, it carries no Compost from the Soyl, and even the Labourer pays it cheerfully when work is quick."[4]

The excise, however, did not exist long before the pamphleteers began to have more decided views as to its incidence. Thus began the differences of opinion, which we shall now proceed to explain.

1. *The Excise does not rest on the Poor Consumers*

The first economist to express any decided opinion on the incidence of the excise was the famous advocate of the Mercantilist theories, Thomas Mun. He discusses the tax systems

[1] *An Expedient for Regulating the Customes and Excise. Approved by divers well affected Marchants, and others of the Citty of London.* By Francis Cradock. Marchant. London, 1659, p. 1.

[2] *England's Interest Asserted in the Improvement of its Native Commodities; and more especially the Manufacture of Wool.* By a true Lover of his Majesty and Native Country. London, 1669, p. 33.

[3] *A Discourse shewing the many Advantages which will accrue to this Kingdom by the abatement of USURY, together with the Absolute necessity of Reducing Interest of MONEY to the lowest rate it bears in other Countreys, That, at least, we may Trade with our Neighbours upon Equal Termes. Humbly presented to the High Court of Parliament now Sitting.* By Sir Tho. Culpeper, jun. Kt. London, 1668, p. 3. The title of the work explains why Culpeper follows up the passage in the text by the admonition: "Then tax Usury, there is no Consumption like it; Excise the Excise-man, for Usury is the grand Excise upon our Land and Trade."

[4] *Ibid.*, p. 2. Culpeper is opposed to any further taxation of land, and expresses himself vigorously as follows: —

"Can the Land bear it? Surely No, if it be not limited to the present distress, and sweetened with some Recompense: Alas! Land is at its last Gasp, and ready to give up the Ghost, without a powerful Cordial: Most Parishes can already present some Farms wholly deserted, Neither Tenant being willing to hire, nor Owner able to stock them; Many stocked but two halfs, most to loss: Be-

of Italy and Holland, and finds their essence to consist in "a custom on all new wares transported, customs upon every alienation or sale of live Cattel, Lands, Houses, and the portions or marriage mony of women, license mony upon all Victualling houses and Innkeepers, head money, Custom upon all the Corn, Wine, Oyl, Salt and the like, which grow and are consumed in their own dominions." Now all these seem to be "a rabble of oppression to make the people poor and miserable."[1] But Mun declares this to be a mistake. For in proportion as the necessaries of life increase in price, the rate of wages must rise also. In the long run, therefore, the taxes on the poor will be shifted to the employers, and through them to the rich consumers of manufactured articles.[2] This is a good thing, because the rich will thus be "forced to abate their sinful excess and idle retainers."[3] Mun's idea, it is plain, is that taxes on consumption are to be commended because they will be shifted to the employing producer; or, at all events, that they must not be regarded as falling on the consumption of the mass of the community.

Other writers furthered the doctrine that the excise did not rest on the mass of consumers by advocating the wider theory that taxes in general are really no burden. Thus, Waterhouse maintained that "money raised upon the poorer sort, returns to them again" in the shape of increased em-

sides, Land is like the heart, from which all the other Members must receive their Life and Vigour; Great reason therefore have we to cherish our Land, unless we will reduce our selves to the state of a meer Colony; which would manifestly end in our Desolation and Conquest."

[1] *England's Treasure by Forraign Trade, or, the Ballance of our Forraign Trade is the Rule of our Treasure.* By Thomas Mun. 1664, chap. xvi.: "How the revenues and incomes of princes may justly be raised," pp. 151, 152.

[2] "Neither are these heavy Contributions so hurtfull to the happiness of the people, as they are commonly esteemed: for as the food and rayment of the poor is made dear by Excise, so doth the price of their labour rise in proportion; whereby the burden (if any be) is still upon the rich, who are either idle, or at least work not in this kind, yet have they the use and are the great consumers of the poors labour." — *Ibid.*, p. 154 (p. 85 of the reprint of 1895 in Ashley's *Series of Economic Classics*).

[3] *Ibid.*, p. 155.

ployment or higher wages, and that a tax must be looked upon as a loan, the proceeds of which soon come back to the taxpayers.[1] Another writer laid down the proposition that "Impositions upon a People make them thrive,"[2] and that "Taxes are no Charge either to the Kingdom in general, or to particular Persons; but on the contrary a Gain to all."[3] His chief arguments to prove this assertion are, first, that since taxes are employed on court or for war they make money circulate, and, secondly, that "the poor are employed by Taxes, and are by that means taken off from being a Charge to the Kingdom."[4] The author goes even farther than Waterhouse; for while the latter contented himself with calling taxes a species of loan, the former maintains that they ought properly to be regarded as the poor man's bank, which supports him in distress.[5] Of all taxes, none appears to him so good as the excise, "which indeed seems of all Taxes the most equal: for that no man by it can be said to be oppressed,

[1] "What money the people bestow upon his Majesty in Leavies and assessments, his Majesty returns to his people in wages, pay, exchange and Merchandize, what he receives for his care, he payeth them for their Labour; what is paid to his *Exchequer* is returned to their Markets: there is a circle in the veine of Gold and Silver as in that of blood. . . . This money is not *lost*, but *lent*. . . . What the Gentry take from you with one hand, they give you with another; what their power ruling over you calls for in contribution, their goodness in employing you bestows upon you in wages." — *One Tale is good, until another is told, or, Some sober Reflections upon the Act for Chimney-Money. Drawn up for the Use of some Neighbors, and thought usefull to be communicated to the good people of this NATION.* By William Waterhouse, Esq., London, 1662, pp. 29, 30.

[2] *Taxes no Charge: in a Letter from a Gentleman, to a Person of Qualitye Shewing the Nature, Use, and Benefit of Taxes in this Kingdom; and compared with the Impositions of Foreign States.* London, 1690, p. 5.

[3] *Ibid.*, p. 9.

[4] *Ibid.*, p. 13. Additional reasons are that "the worst members in the Commonwealth (viz.) the Extravagant and Debauch'd" really pay the taxes, and that so far as taxes consist of customs duties, they "Keep out a Destructive Trade."

[5] "'Tis a vulgar error to believe that Taxes, even to the meanest Man is a Charge, for that his Mite is with increase return'd by the expence of that which would never have seen day, but by the force of a Law; so that publick Taxes, expended in our own Country, may be accounted the poor and the Mechanick's bank, by which they are employed, and maintained." — *Ibid.*, pp. 17, 18.

he being his own Assessor, and pays but what he pleases, according to his Expence." [1]

Another anonymous pamphleteer of the same period agrees that "Excises are the most equal and less grievous Tax of all others," and believes that a moderate tax will not be felt to such an extent as to hinder consumption at all.[2] "Who would ever use the less Sugar, if one peny Excise were paid out of twelve peniworth? Who would use the fewer Ribbons, for 2d. Excise upon every 12d.? Who would play the less at Cards or Dice, if 3d. were paid out of 12d.? What Lady would ever forbear to wear Pearls or Diamonds, or to buy Fans and Looking-Glasses, if 4d. were laid upon every 12d.?" Our author's confidence in the harmlessness of a tax amounting to one-third of the value of a commodity would, perhaps, not be shared by many of the present day.

These views of Mun and his successors as to the virtual immunity of the mass of consumers from the weight of taxation did not, however, make much headway. During the following decades the opinion, to be discussed in the next section, that the excise was a real burden on the poorer consumers, gradually gained ground. But toward the middle of the eighteenth century, isolated writers reverted to the theory of Mun. Of these, none is more remarkable than Fauquier. He gives a most lucid and vigorous argument, designed to show that a tax on the workingman, whether a direct tax on wages or an excise on the necessaries of life, will inevitably be shifted from his shoulders. Fauquier puts his general principle as follows: "The Poor do not, never have, nor ever possibly can, pay any Tax whatever. A man that has noth-

[1] *Taxes no Charge*, p. 25. Although the author opposes the benevolences, monopolies, alterations of money and taxes on polls, offices and travellers, he suggests a supplement to the general excise through taxes on Jews, playhouses and "the Vermin of the Nation, lewd Persons of both Sexes." It is no wonder that he confesses in another place: "thus I have huddl'd together a mixt Discourse." — *Ibid.*, p. 19.

[2] *A familiar Discourse between George, a true-hearted English Gentleman, and Hans, a Dutch Merchant: Concerning the present Affairs of England.* London, 1672, pp. 37, 38.

ing can pay nothing."[1] He proceeds on the assumption that wages are always at the bare minimum of subsistence. If the laborer, therefore, can no longer live on his usual income, whether this condition be due to an increase in the price of necessaries or to a forcible diminution of his wages through a tax, his nominal wages must rise in proportion.[2] In fact, Fauquier believes that in many cases his wages will rise more than in proportion to the tax. But this he does not attempt to prove. He does, indeed, try to show that when a tax is imposed on the producer or the seller of commodities, a sum over and above the tax will be shifted to the purchaser.[3] But even if this conclusion were valid as to profits, the reasoning would not be applicable to wages. However this may be, Fauquier is quite positive that taxes rest only on the rich consumer, "that is, the Man of Fortune who lives on his Income." And this is true, "even in those Taxes which are said mostly to affect the Poor, and which they seem, at first Sight, to pay out of their own Pockets." [4]

Fauquier, indeed, differed from Mun in his practical conclusions. For while Mun advocated the general excise, Fauquier opposed it on the ground that the same result — that

[1] *An Essay on Ways and Means for raising Money for the Support of the Present War, without increasing the Public Debts.* By F. F. (Fauquier), London, 1756, p. 17.

[2] "If Taxes are laid on Labour meerly, or on such Articles as the meanest Labourer must want and use, he will still live, and his Wages must be raised." — *Ibid.*, p. 20.

[3] "If by Taxes . . . the common Necessaries of Life become so dear, that a Labourer cannot live at the usual Wages, the Price of Labour must rise in Proportion thereto."—*Ibid.*, pp. 19, 20.

[4] *Ibid.*, p. 20. A similar argument is found in a pamphlet of almost the same date, entitled *The Man's mistaken who thinks the Taxes so grievous as to render the Nation unable to maintain a War.* By an old Englishman. London, 1755, esp. p. 11. This is largely a plagiarism from an earlier one, also written during a war: *The Taxes not Grievous and therefore not a Reason for an Unsafe Peace.* London, 1712. As soon as the war was over, however, a different opinion was expressed; as, notably, in *The Nature and Weight of the Taxes of the Nation: shewing that, by the continuance of Heavy Taxes and Impositions . . . Trade is destroy'd, the Poor increas'd; and the Miseries and Misfortunes of the whole Kingdom demand the Consideration of the Freeholders.* London, 1722.

of taxing expense — might be more conveniently attained in another way.[1] The point of interest to us here, however, is that both writers agreed in the belief that an excise would not rest on the poor consumer, but would be shifted to the employer, and that if we can speak of an excise resting at all on the consumer, it is the rich consumer that is meant. This doctrine was later accepted by Sir James Steuart[2] and became a part of the classical doctrine, as elaborated by Adam Smith and Ricardo.

2. *The Excise rests on Consumers in General*

By far a majority of the writers believed that the excise rested on the mass of consumers in general, irrespective of the fact whether they were poor or rich. This broad theory was ushered in by the famous economist and statistician, Sir William Petty. Petty also has the distinction of being the first English writer to devote an entire work to the subject of taxation.[3] It will repay us, therefore, to dwell somewhat more fully on the general theory of incidence that is found in his book.

Petty first discusses the procuring of revenue from land, which he says can be done in two ways, — either by "setting apart a proportion of the whole Territory for Publick Uses," or by "an excision of the land by way of assessment or land taxe." Such a land tax, where "an aliquot part of every Landlords Rent were excinded or retrenched," is good in a new country, where a certain quit-rent is reserved beforehand, because it will be borne partly by the landlord, but also partly by the consumers. For "it is not onely the Landlord pays, but every man who eats but an Egg, or an Onion of the growth of his Lands; or who uses the help of any Artisan, which feedeth on the same."[4] In old countries, like England, he continues, where rents are fixed for a long time, such

[1] See below, p. 91.

[2] See below, p. 54.

[3] *A Treatise of Taxes and Contributions.* [By William Petty.] London, 1667.

[4] *Ibid.*, p. 20.

a tax would be unjust, because it would benefit only the landlords who renew their rents. These gain doubly, "one way by the raising of their Revenues, and the other by enhansing the prices of provisions upon them." For the tax "doth ultimately light upon the consumptioners," or, as he again puts it, a "Land-taxe resolves into an irregular Excize upon Consumptions, that those bear it most, who least complain."[1]

Petty also discusses the house tax or "an Excisium out of the Rent of Houseing." He deems the influence of this much more uncertain than that of land, "for an House is of a double nature, viz.: one, wherein it is a way and means of expence; the other, as 'tis an Instrument and Tool of gain. . . . Now the way of a Land-taxe rates housing, as of the latter nature, but the Excise as of the former."[2] From which it may be inferred that Petty thinks a house tax will be shifted to the consumer or occupier, and will be shifted further on to consumers when the occupier himself is a producer.

In regard to "customs," both "outwards" and "inwards," Petty assumes that they will be shifted to the consumers, and concerns himself primarily with stating the principles on which they should be levied. His chief objection to customs duties is that they are frequently imposed on articles which serve as the raw materials for further production, or, as he puts it, "that Duties are laid upon things not yet ripe for use, upon Commodities in *fieri*, and but in the way of their full improvements."[3] Poll-money, which he opposes because of its inequality,[4] he thinks cannot be shifted. He concludes that a general excise is the best of all taxes, and assumes that, while it will be transferred to the general consumer, it cannot be shifted any further. In this respect it is superior

[1] *A Treatise of Taxes and Contributions*, p. 21.

[2] *Ibid.*, p. 21.

[3] *Ibid.*, p. 36. "This," he later adds, "is the reason why I think the Leavy we commonly call Customs to be unseasonable and preposterous, the same being a payment before consumption." — *Ibid.*, p. 70.

[4] Petty grows very indignant over the English system: "so as by this Confusion, Arbitraries, Irregularities, and hotch pot of Qualifications, no estimate could be made of the fitness of this Plaister to the Sore." — *Ibid.*, p. 41.

to the land and house taxes; for these, as we have seen, are only partially shifted to the consumer.

Petty's views on the general property tax are interesting as showing in this, the first book on the theory of taxation, a recognition of the defects of the system which was gradually coming to its close in England. After recounting the many defects and abuses connected with the system,[1] he closes with the statement: "I have not patience to speak more against it: daring rather conclude without more ado, in the words of our Comick to be naught, yea exceeding naught, very abominable, and not good." In another work, however, Petty seems still to pin some faith on the chance of reaching personal property.[2]

This is not the place to discuss Petty's many reasons for favoring expenditure as the basis of taxation.[3] It will suffice for our purposes to state that, starting out from the principle that a tax on expense is the ideal form of taxation, Petty advocates the general excise as reaching this result most surely and most speedily. He discusses the plan of levying a single tax on some one object of expenditure, termed by him the "Accumulative Excise" or tax "upon some one single particular," which may be deemed "to be nearest the common standard of all Expense." But he prefers the scheme of levying a tax upon "every particular Necessary, just when it is ripe for Consumption."[4] Still, as he himself sees that

[1] "There have been in our times, ways of levying an *aliquot* part of mens Estates, as a Fifth, and Twentieth, *viz.* of their Estates real and personal, yea, of their Offices, Faculties, and imaginary Estates also, in and about which way may be so much fraud, collusion, oppression, and trouble, some purposely getting themselves taxed to gain more trust: Others bribing to be taxed low, and it being impossible to check or examine, or trace these Collections by the print of any footsteps they leave (such as the Hearths of Chimney are)." — *A Treatise of Taxes*, pp. 61, 62.

[2] He hazards the conjecture that "assessments upon personal estates, if given in as elsewhere upon oath, would bring that branch which of itself is most dark to a sufficient clearness." — *Verbum Sapienti; or . . . the Method of raising Taxes in the most equal manner*, p. 17 (Appended to his *Political Anatomy of Ireland*, edition of 1691). *Cf.* Seligman, *Essays in Taxation*, p. 48.

[3] They may be found in chap. xv. of *A Treatise of Taxes.*

[4] This he terms "the very perfect Idea of making a Leavy upon Consumptions." — *Ibid.*, p. 69.

this may be "too laborious," Petty suggests as an alternative scheme that "we ought to enumerate a Catalogue of Commodities, such whereof accompts may be most easily taken," but "being withall such, as are to be as near Consumption as possible."

The views of Petty gradually diffused themselves throughout the community, keeping pace with the ever-widening use of indirect taxes on consumption. Many of the writers of the close of the seventeenth century now became ardent advocates of the general excise. The author of an interesting pamphlet, after giving a definition of excise,[1] proceeds to explain that, although the "makers or Factors" of commodities advance the money, they really shift the tax to the public without the latter being aware of it. This constitutes, in his eyes, the great advantage of the excise; for if the tax were imposed directly on the consumers, it would give rise to great complaint.[2] The author is very careful, however, to emphasize the necessity of taxing only those articles which are necessaries of life and in universal use. In this way, he asserts, not only will the revenue be large, but the principle of universality of taxation will be carried out.[3]

Another writer of the period lays stress rather on the

[1] "When we speak of an Excise, we mean . . . the whole Duties of any kind whatsoever, that are charged upon any Goods or Commodities expended within the Kingdom." — *A Discourse (by way of Essay) humbly offer'd to the Consideration of the Honourable House of Commons, towards the Raising Moneys by an Excise, demonstrating the Conveniency of Raising Moneys that Way.* By W. C., Esq. London, 1695/6, p. 3.

[2] "The Money being deposited by the *Makers* or *Factors* who take it again, in the Price of them, at the Sale, the People pay it insensibly in the Value of the Goods they buy; for we must not think that the *Merchants* or *Traders* pay all the Money of the *Customs* and *Excise;* they are but the Depositors of it, and the People paying it in a way so secret and insensible, it meeteth not with any Contradiction from them, as it would do, were they themselves to lay down the present money." — *Ibid.*, p. 4.

[3] This plan is "that whatsoever Commodities be made Excisable, are to be of a large, universal and necessary Expence: Of a large Expence, otherwise, there will be a great Noise to little Purpose. If it be of an Universal Expence, then every Man will bear his Lot. If it be of Necessary Expence, there will be no avoiding the Use of that Commodity." — *Ibid.*, p. 8.

principle of equality. He advocates the excise because of the breakdown of the general property tax, which by that time had become known as the land tax. "What can be a greater heart-breaking," he asks, "than to pay double and treble in proportion to other people."[1] And referring to the great discrepancy between the theory and the practice of the general property tax, he exclaims: "but that which was well designed was so villanously executed that even those taxes proved shamefully unequal. For experience," he adds, "hath taught us that men will strangely swear and forswear to save themselves and their neighbours from being screwed up."[2] An excise will avoid all these difficulties and will moreover be in accordance with the doctrine that "every man should give something." Incidentally it may be remarked that in this writer we find the first statement of the theory which was subsequently to play such a great rôle, that every old tax is a good tax. "When a man hath bled much, if you go to take a further great Quantity from him, at once and presently, it may prove fatal. But after a while, his Bloud being recruited and supplyed, you may take more without hurt or danger; especially if you do it by degrees. And 'tis just so with our Nation in point of Taxes."

The same belief in the excise, on the score of its reaching

[1] *A Proposal for an Equal Land-Tax, humbly submitted to Consideration.* London, 1691, p. 3.

[2] *Op. cit.* p. 4. It is for this reason that he is opposed to farmers and informers. The subject of farming the taxes was much discussed at the time. An early pamphleteer defended it on the ground that "these taxes are subject to infinite fraud and cozenage whereby the subjects elude their payment. These deceits will be most diligently enquired into by private farmers, as reaping so much the more profit, by how much the more carefull they are to detect and avert these frauds. For men are usualy more solicitous about their private Wealth, than for the Common-wealth." — *The City Alarum or the Weeke of our miscarriages, which have hitherto obstructed our proceedings, and will now retard them if not speedily removed. Whereunto is annexed a Treatise of the Excise.* London, 1645, p. 32. The argument against farming is put by a later writer in the statement that "in a Farm the overplus of the Sum contracted for is all sunk into the Farmer's Pocket, whereas the whole Advance [otherwise] accrews to the Publick." — *A Proposal for advancing the Revenue of Excise, humbly offered to the Honourable the House of Commons in Parliament assembled.* London, 1707, p. 11.

the entire mass of the consumers, is found in the work of Burnaby, who advocated an extension of some of the internal duties on commodities. His particular scheme was the imposition of a tax on malt, which in his opinion "will be less felt than usually Taxes are, by reason every person will pay Proportionable in the Price of Malt."[1] He lays down his general principle as follows: "The more universal any Tax is, it is to be supposed (unless in some Particular Cases) to be the more equal." Then follows the minor premise: "I presume, no Person will deny that such a Tax will prove so universal, that not any Person will escape paying his Proportion according to his consumption." From all of which it is easy to draw the conclusion that "no Person can complain; who Consumes little, will have but little to pay."

A similar belief in the advantages of a tax on malt is found in an author of a decade later, who favors the tax primarily on the ground of its equality and its universality. "No tax," he tells us, "seems to be so equal as that upon malt," and no tax will be so universal because "none will be able to evade the full of (or near) their proportions."[2] The doctrine of the consonance of the general excise or of particular excises with the canon of equality of taxation, on the ground of reaching all in proportion to their expenditure was especially emphasized by Houghton, who elaborated a scheme of taxes upon a great variety of commodities, like leather, fowl, fish, hides, and hops, as well as on windmills and watermills. "If Equity may take place amongst the People, there will be little Rea-

[1] *Two Proposals, Humbly Offer'd to the Honourable House of Commons, now assembled in Parliament. I. That a Duty be laid on Malt, in the stead of the present Duty on Beer and Ale. II. That a Duty be laid on Malt, and the present Duty on Beer and Ale be continued.* By A. Burnaby, of the Middle-Temple, Gent. London, 1696, p. 2. *Cf.* p. 24. Much the same idea is contained in another pamphlet by Burnaby, entitled: "*An Essay upon the excising of Malt, as also the present Case of Tallies considered.* London, 1696. *Cf.* pp. 23 and 80.

[2] *Proposals to Supply His Majesty with Twelve or Fourteen Millions of Money (or More if Requir'd) for the Year 1697, without Subscriptions, or Advancing the present Taxes.* By A. D. of Greys-Inn, Esq:, and some others his Friends. London, 1697, p. 3.

son," he thinks, "for any to complain, why this Imposition or Duty should not be thus charged."[1] Some pamphleteers went a step farther and defended the excise on the ground that it would improve the quality of the product. This position was, for instance, taken by De Foe, in his discussion of the excise on ale, in an ingenious argument. "The strong ale," he tells us, "will rise in its Price, both by reason of the double Excise, and because the Brewers will probably brew it stronger, and thereby raise its value that it may better bear the Excise."[2]

Another writer, commenting upon some of Petty's statements, puts very forcibly the case for the general excise, of which he says, "I must allow, 'tis, singly considered, perhaps the most equal, and Innocent of any particular way of Taxing, commonly proposed or discoursed of."[3] Not only is every man, he thinks, his own assessor, but the tax is paid by the final consumer almost unconsciously; it conduces to thrift, and it spares the land, which is the real source of public wealth.[4] Nevertheless he is alive to some of its shortcom-

[1] "For," he adds, "in these Duties every Person will be taxed, and pay more or less, according to the Quantity he or she useth; if Poor, they use little, and therefore Pay the less; if Rich, they Pay the more, in Proportion to what their Expence and Consumptions are; so that nothing can be more equally laid, and Charg'd upon the People, than the *Taxes* afore-said." *A BOOK OF FUNDS: or, Some Reasonable Projections and Proposals for Raising Three Millions of Money per Annum, for Supplies, to be Granted His Majesty. By such Ways and Methods as will be least Burthensome to the People, during the War. Most Humbly Offer'd to the Consideration of Both Houses of Parliament.* By Thomas Houghton, of Lyme-Street, Gent. London, 1695, p. 13.

[2] *The State of the Excise, etc., vindicated, from the Remarks of the Author of the Short View, etc., wherein some other Escapes of that author are likewise taken notice of.* [By Daniel De Foe.] London, n. d. [c. 1706.]

[3] "Excepting," he adds, like all the writers of the time, "Imposts on some Foreign hurtful Superfluities, for the due regulating of Trade." — *A Letter from a Gentleman in the Country to his Friend in the City: touching Sir William Petty's Posthumous Treatise; entitled Verbum Sapienti, etc.* London, 1691, p. 14. This tract has sometimes been ascribed, but probably without good reason, to Sir Thomas Culpeper.

[4] "It hath a notable Air and Aspect of Freedom, every one being indeed his own Assessor: It rises almost insensibly, bringing the Multitude (who are more apt to murmur at integral Taxes), without much Grudging, to pay their Quota's in this. It affects not immediately the Fund of Land, as our sole Land-Taxes mischievously

ings,[1] and queries whether the object of relieving the land from excessive taxation may not perhaps be more conveniently attained in another way.[2]

A considerable number of other writers, who believed that the excise would be shifted to the mass of consumers, now began to express their doubts as to the beneficence of the tax in general. Several went no further than to criticise the rate of the tax, admitting the validity of the principle of the excise, but desiring necessaries to be taxed at a lower rate. Thus Sheridan contends that "the Excise, if equaly imposed, were the best and easiest of all taxes,"[3] and advances the usual arguments in its favor.[4] But in discussing some of the special excises, such as the beer-tax, he maintains that they should have been levied on the richer classes, rather than on the workingman.[5] It is perhaps his uncertainty as to the real benefits of the excise that leads him to propose as a possible, but novel, substitute a tax on bache-

do: And so powerfully doth it recommend, indeed preach Frugality, that, to say the truth, It in a manner condemns all Unthrifts, as meer Ideots or Lunaticks." — *Ibid.*, p. 14.

[1] "Excise, you know, hath obtained a current Repute of perfect Equality: Now I by no means admit of that; not only Niggards, but all those whose Condition obliges them not to live Honourably upon their Demeans, at pleasure avoiding it."

[2] See below, chap. iv.

[3] *A Discourse of the Rise and Power of Parliaments, of Laws, of Courts of Judicature, of Liberty, Property, and Religion, of the Interest of England in reference to the Desines of France, of Taxes, and of Trade. In a Letter from a Gentleman in the Country to a Member in Parliament.* [By Thomas Sheridan.] London, 1677, chap. xiii, "of Taxes." Reprinted as a separate volume in *Some Revelations in Irish History; or, Old Elements of Creed and Class Conciliation in Ireland.* Edited by Saxe Bannister. London, 1870.

[4] "It ought to be laid upon all things ready to be consum'd. This puts it into the Power of every man to pay more or less, as he resolves to live loosely or thriftily; by this course no man pays but according to his Enjoyment or actual Riches, of which none can be said to have more than what he spends; tru Riches consisting only in the use." — *Ibid.*, p. 175 of the original.

[5] "To speak the truth, in good Conscience, this Branch ought to have been imposed on the nobles and estated-men rather than on the Artificer and Laborers, who were very slenderly concern'd in the grounds of it." — *Ibid.*, p. 176.

lors.[1] In much the same spirit the author of the celebrated *Britannia Languens*[2] advocates an excise primarily on the superfluities of the rich, and maintains that if excises are levied on ordinary necessaries at all they must be very low ones.[3] A little later we find the view that high excises are clearly pernicious, and that revenue should be derived rather from "small excises" on commodities which had hitherto escaped taxation.[4] Finally, the growing belief that high excises would ultimately affect the consumer led some writers to advocate particular kinds of excises for the precise purpose of diminishing extravagant consumption. A good example of this is the proposal to tax bricks in order to check the growth of London at the expense of the rural districts.[5]

[1] "I have thought of a sort of tax which I believe is perfectly new to all the world. . . . It is a tax upon celibate, or upon unmarried people, *viz.:* that the eldest sons of gentlemen, and other degrees of nobility upwards, and all other persons not married by the times limited as aforesaid [from twenty to twenty-five years of age], shall pay per annum a-piece these following rates, etc., etc.; and all married men not cohabiting with their wives to pay quadruple." — *A Discourse on the Rise and Power of Parliaments*, pp. 177, 179.

[2] *Britannia Languens, or a Discourse of Trade: shewing the Grounds and Reasons of the Increase and Decay of Land-Rents, National Wealth and Strength,* etc. London, 1680.

[3] "But since I have now, and before mentioned Excises, and have observed some men of Parts, almost to startle at the naming of a new Excise, I shall thus far explain and vindicate myself, and the proposal: First, I shall agree that such Excises as affect and over-burthen the beneficial parts of Trade, are of pernicious Consequence. Secondly, that an Universality of Excise is both inconvenient and unnecessary; but that there may be Excises Imposed on many Superfluities, and Excesses, in Meats, Drinks, or Equipages, or upon some imported Goods *Consumed at home,* which would be no prejudice to any kind of Trade; being no clog upon our Exports, or Re-exports; or perhaps, a very small Excise on ordinary Meats, Drinks, and Apparel, might be supportable." — *Ibid.*, p. 294.

[4] "High Customs and Excises are great Obstructions to Trade. . . . This Grievance might be redressed by moderating the excessive Duties, and making the Excises more universal." The author therefore proposes "a new Fund by small Excises on Things which have not been yet Taxed." — *A Proposal for the Payment of the Publick Debts, and an Account of some Things mentioned in Parliament on that Occasion.* London, 1714, p. 20.

[5] "The Duty on Bricks and Tiles may give a seasonable Check to the wanton and extravagant Humour of Building, particularly about this Metropolis, whereby the Head is likely to grow too big for the Body." — *Animadversions and Obser-*

The authors hitherto discussed, holding to the doctrine that a tax on the producer or dealer is shifted to the consumer, all agree that excises are desirable, although they differ somewhat in the intensity of their desire for such a method of revenue. But we now meet with a class of writers who hold the same theory of incidence, while at the same time they strenuously object to all excises, precisely because they fall on the consumers. They accept the doctrine that excises are shifted to the consumer, but they do not believe that the consumer ought to be saddled with the entire load. We meet with this objection to excises very shortly after the inauguration of the system.[1]

The growing opposition is well reflected in a Scotch pamphlet written at the beginning of the eighteenth century, in which a melancholy picture of the future of the kingdom is traced, and the gradual pauperization of the whole community is predicted.[2] But it was especially at the time of Walpole's excise scheme that this opinion as to the perni-

vations upon a Treatise entituled Some Calculations and Remarks relating to the present State of the publick Debts and Funds . . . by Archibald Hutcheson . . . to which is added a New Proposition to raise Money for the Use of the Publick. Humbly submitted to the Consideration of both Houses of Parliament, etc. London, 1718, p. 47. The author joins to this recommendation, a proposal for a tax on plate.

[1] One of these early writers expresses himself very vehemently, as follows: "That the Excise of Ale, Beer, Perry, and Syder, and the charges, affliction, and troubles, which it brings upon the people, which before our times of misery, would have brought death and ruine any private contriver; and was at the first created by Oliver and his Impes to maintain a cursed Rebellion, and set up a destroying and detestable Anarchy, may be abolished, and taken away, and the Nation restored to the freedom and quiet which they formerly enjoyed under this our ancient and excellently composed Monarchy." — *Restauranda : or the Necessity of Publick Repairs, by setling of a certain and Royal yearly Revenue for the King.* [By Fabian Philips.] London, 1662, p. 95. A still earlier fulmination was: *A Declaration against the illegal, detestable, oft condemned new Tax and Extortion of Excise in general, and for Hops (a native uncertain commodity) in particular.* By William Prynne, Esq. London, 1654.

[2] "Our Merchants are the first Advancers of the Taxes that are upon Trade, but they are refounded with double Interest by the Noblemen and Gentlemen, who for the most part consume all the valuable Goods Imported.

"Our Peers and Barons, may easily judge, how far they will be able to make

cious effects of the excise was expressed with great energy.[1] Some of the writers, however, who were then quite willing to abandon consumption as the general norm of taxation, based their opposition to excises primarily on the ground that the tax falls with greater severity on the poorer consumer, and that it is to be reprehended for this reason.

It was this alleged result, together with the administrative inquisitorial characteristics[2] that rendered the excise scheme so repugnant to the mass of the people. And it was in vain that the defenders of Walpole's project protested against the

any Consumpt of these goods, or pay what they get, when there is not only Taxes on their land, but on the Product of their Land, *viz.* their Malt, Beer, and Ale.

"Our Burgesses may soon consider, that when the Peers and Barons have no Money, their Trade must decay.

"Our Mechanicks will have no difficulty to believe, that if there be no Trade, and no circulation of Money, their best Trade will be a Plantation Trade.

"And in the last place, when our Commons buy such dear Ale, pay so much Tax on Salt, have nothing or a very small Price for the Fruit of their Labour; they will never be in a Condition to pay their Farms; so in place of Riches, Poverty will soon circulate among us." — *A Short View of our present Trade and Taxes compared with what these Taxes may amount to after the Union. With some Reasons why (if we enter in an Union,) our Trade should be under our own Regulations.* 1706, pp. 5, 6. The work is sometimes ascribed to Daniel De Foe.

[1] *Cf.* the following passage: "Excises first got a footing amongst us in the Civil Wars, which was a time of universal confusion; and they were then so odious that each party branded the other with being the Authors thereof; but before that they were so much dreaded that a Member of Parliament was very near being sent to the Tower for only mentioning their name in the House, tho' with no evil design: What then would they have done to the Man, who should have proposed multiplying them, when the Nation groaned under the Burthen of so many, as we do already." — *A Word to the Freeholders and Burgesses of Great Britain, being Seasonable and serious Remarks upon the inconsistent Conduct of certain Boroughs, in sending instructions to their Representatives to oppose the Excise Bill, and yet re-electing them after their being rewarded with Places for voting for the same.* London, 1733, p. 31.

[2] This side of the tax is well illustrated in the following vigorous extract from a contemporary pamphlet: "Why really I can't help thinking, that for a free-born *Englishman* to have his Warehouse, Shop, and House, even to his Wife's Bedchamber, visited, and rummaged, at all Hours of the Day or Night, by every pert Radical that shall think it worth his While to be troublesome, at the same time that the Fellow, strip him of his Salary, shall not be worth a *Groat;* nor, perhaps, would not be trusted in an *honest* House, is an Inconvenience, to whom even

identification of his scheme with the hated excise.[1] Some of the writers also added the further objection that the excise sins against the doctrine of equality because of its failure adequately to distinguish between the various quantities of the article consumed.[2] In the main, however, it was the argument of the unequal pressure of the excise upon the poor which won the day.

One of the earliest authors to show this defect in the excise is Cary. He starts out with the general proposition that the tax system must be so contrived "that the Poor bear little or none of the Burthen, their Province being more properly to labour and fight than pay." [3] Not only does a man who works for his income part with it with reluctance, says he, but the revenue accruing to the government from these small

the Gentleman who treats it so mildly would not care to be subject: In plain *English*, 'tis a damnable Hardship, such a Hardship that the *Christians*, who are born subjects to the Great *Turk*, and are look'd upon by the *Mahometans* as little better than Dogs, are not exposed to the like." — *The Vintner and Tobacconist's Advocate, being Remarks upon, and a Full Answer to those Scandalous Papers published in The Daily Courant, under the title of The Occasional Financier, and under the Names of Carus and Meanwell.* London, 1733, p. 26.

[1] Thus one writer indignantly repudiates the assertion that any general excise is involved, qualifying the statement as "an insinuation, so extravagant a calumny, so notorious a work of egregious ignorance, so infamous a consequence of slanderous injustice and so palpable an attempt to poison the minds of the people," that it is nothing more than "the coinage of daily propagators of clamour." — *The Reply of a Member of Parliament to the Mayor of his Corporation.* London, 1733, p. 20. A similar attitude is taken in *An Impartial Enquiry into the Present Question concerning Excise, in which the advantages arising to the King and Subject from raising Duties by Excise are demonstrated and the Objections thereto obviated.* London, 1733. See also *The Economic Policy of Robert Walpole*, by N. A. Brisco, New York, 1907, esp. pp. 123 *et seq.*

[2] This criticism can be best illustrated by a later author, who said: "This Accuracy, this Justness of Proportion, this Equality — a general Excise upon Consumption will never obtain it. For in that Case, those who indulge themselves in the best Sorts and those who are confined by their Circumstances to the *most ordinary*, would each of them pay the same Tax." — *An Address to such of the Electors of Great Britain as are not makers of Cyder and Perry.* By the Representative of a Cyder-County. London, 1763, p. 15.

[3] *An Essay on the State of England in relation to its Trade, its Poor and its Taxes, for carrying on the present War against France.* By John Cary, Merchant in Bristoll. Bristoll, 1695, p. 173.

payments will after all be insignificant.[1] The vital objection to the excise, however, is its inequality; for although the rich man consumes more than the poor man, the tax is paid in the one case out of the surplus over and above all needful expenditure, but in the other case out of a fund which barely suffices for the necessaries of life.[2]

This view, which closely approaches the one held by modern democracies, was occasionally emphasized in the following decades. One vigorous writer, early in the eighteenth century, objects to "those cruel and unequal Taxes, which pinch and afflict those People chiefly who are least able to support Taxes."[3] He advances what he calls a "true, tho' perhaps not a regularly determin'd Observation"; namely, "when Land is Tax'd, the Rich pay more than the Poor; but when the Product of Land is tax'd, the Poor pay more than the Rich." He proceeds to show that "the Rich pay for their Land because they have it; the Poor pay for their daily Necessaries, because they have them not."[4] Owing to his belief that taxes on commodities are relatively more burdensome to the poor, he favors the land tax,[5] together with a tax on funds.[6]

[1] "He that gets his Money by the Sweat of his Brow parts not from it without much Remorse and Discontent, and when all is done, 'tis but a little they pay, therefore Taxes that light heavy on them (such as Chimney-Money, and oftentimes a Poll) tend rather to unhinge than assist the Government, by disgusting such a number of robust and hardy men as carry a great personal Ballance in the Kingdom." — *Ibid.*, p. 174.

[2] "A general Excise cannot do well, for besides the great Charge and Oppression of Officers, it shews no Respect to the Poor, but they pay more than the Wealthiest of their Neighbours suitable to what they have; for though a rich Man spends more in excisable things than a poor Man doth, yet it is not his All, whereas the other's Poverty gives him leave to lay up nothing, but 'tis as much as he can do to provide Necessaries for his Family, out of all which he pays his Proportion." — *Ibid.*, p. 174.

[3] *Fair Payment no Spunge: or, Some Considerations on the Unreasonableness of Refusing to Receive back Money lent on Publick Securities. And the Necessity of Setting the Nation Free from the Insupportable Burthen of Debt and Taxes.* London, 1717. Chap. ix, "Of Equality of Taxes," p. 60.

[4] *Ibid.*, p. 61.

[5] *Ibid.*, p. 67.

[6] *Ibid.*, chap. x, "Of Inequalities in Taxings," p. 71.

This view as to the incidence of the excise was, however, in some danger of being neglected, when, toward the middle of the eighteenth century, it was again put forward by two writers with such force that it left its indelible imprint on general thought. One of these authors goes so far as to break entirely with the old theory of the basis of taxation, and to lay down the principle that taxes should be levied according to property and not according to consumption. The excise, says he, sins against this cardinal rule, and is therefore convicted of inequality.[1] But even regarded as a tax on property — that is, on commodities — the excise is thoroughly unequal; for not only the tax, but a great deal over and above the tax, will be shifted to the consumer, and will hit the poor man on his necessaries.[2] Our author is, however, so far carried away by his ardor to show the evils of the excise as to intimate that wages must rise with the increased price of necessaries, and that therefore the whole community will suffer in the end.[3] Were it not that he puts his emphasis on the first point — the burden on the poor, — rather than on the second — the burden on the general community — he ought rather to be included with writers like Mun and Fauquier.[4]

[1] "Excises, as they are of all Impositions the most injurious to Liberty, so they are the most unequal in their Nature, and fall the most heavily on Property. . . . They are the most unequal, because Taxes should be measur'd by Property. . . . But Excises measure by the Quantity of a Commodity consum'd: Whence the Contribution of a poor Man with a large Family, may exceed Those of a rich Batchelor of a hundred Times his Fortune." — *An Appeal to the Public, in relation to the Tobacco * * * and a Revival of the old Project, to establish a General Excise.* London, 1751, p. 51.

[2] "They fall most heavily on Property, more especially when impos'd on Necessaries, or on Commodities render'd by Habit necessary, because they accumulate as they go; because he that issues the Tax first, will be paid for the disbursement and also for the extraordinary Difficulties, Hardships, and Visitations brought upon him by them." — *Ibid.*, p. 52.

[3] "Because the Price of Labour rises with the Price of the Commodities consum'd by the Labourer: and because the Dearness of Labour affects the whole Circle of our Commerce, both Domestic and Foreign. . . . This is sufficient to shew, that tho' the Trader is the first Person pinch'd on these Occasions, the Evil is progressive, and at last both fastens and preys on the whole Community." — *Ibid.*, pp. 52, 53.

[4] See above, pp. 26 to 30.

The charge of inconsistency can, however, not be brought against Nickolls or Dangeul, the other writer to show the inequality of general taxes on consumption. Dangeul firmly held to the opinion that when taxes reached the consumers they stayed there.[1] Taxes on consumption, in his opinion, are thoroughly unjust, because they are out of all proportion to the relative abilities of the taxpayers; for abilities are measured by property and not by consumption.[2]

The opposition to the excise was also strengthened by those who not only pointed out that high taxes would cause serious damage to the consumer by compelling him to diminish his consumption, but also showed that this would involve a serious loss of revenue to the government. The point that was subsequently so well put by Dean Swift, that in the arithmetic of the customs two and two do not always make four, was already emphasized during the excise controversy, and was declared equally applicable to internal duties.[3]

[1] *Remarks on the Advantages and Disadvantages of France and of Great-Britain with Respect to Commerce, and to the other Means of Increasing the Wealth and Power of a State. Being a (pretended) Translation from the English, written by Sir John Nickolls and printed at Leyden 1754. Translated out of the French Original*, 1754. [Really by Dangeul, Marquis de Plumart.]

[2] "That these taxes incurr the objection of being unequal, and unjust, in that, for the portion of things absolutely necessary to life, the poor and the rich pay the same sum: insomuch that whereas the people being supposed divided into two parts pretty near equal, of which the one has only its industry to live upon, the other possesses riches, enjoys, and pays the labor of the other: these two halves, so different in their abilities, share nevertheless equally the weight of these taxes upon all the commodities, or rather necessaries, of which the consumption admits of little or no abuse or luxury. The contribution is light, for the batchelors or single persons, in easy and idle circumstances: but is excessive for those usefull subjects, of whom the families are numerous, and the fortunes narrow." — *Ibid.*, p. 260. For his practical propositions, see below, p. 58.

[3] "This is a Truth which will, I believe, be acknowledged by all Traders in general, it being universally known that the greater Duty any Commodity pays, the less of it ten-fold is consumed; consequently if the King has two Pence in the Pound for any Merchandize, that before paid but one Penny, not above a tenth Part of that Merchandize will be consumed, and consequently not above a tenth Part imported; so that upon the Ballance the Crown will be a Loser eight Parts in ten." — *The Norfolk Scheme: or a Letter to William Pulteney, Esq.; on the Present Posture of Affairs, particularly with Relation to the Scheme for altering*

One of the most ingenious arguments in opposition to the excise on the score of its wider effects and incidental results is found in the somewhat later work of Brooks, who represented the barbers and wigmakers in their attempts to rid themselves of the duty on starch.[1] After quoting with approval a memorial of the starch-makers to the effect that a decrease of the tax would augment the revenue,[2] and after alluding to the frauds committed by the "Makers of sophisticated Hair Powder," [3] Brooks calls attention especially to two commonly neglected consequences of the tax. What is left in the meal after extracting the starch becomes an excellent "Hog-feed." It is notorious, says Brooks, that the "Bacon and Pork of the Starch Makers' Feed affords the best of Price." The high duty on starch has so diminished the consumption that it has seriously deteriorated the quality of pork, and has interfered with this trade to the colonies and plantations.[4] A still weightier argument however to Brooks is one that came to him as an afterthought. It is well known, says Brooks, that when the army under Marlborough was dressed "with the best of Powder, made of the finest Wheat-Starch" this "bestowed such a Gaiety and Politeness to the Appearance of a young soldier, as drew more *Recruits* to the *Drum-*

the Method of Collecting the Revenues, by converting the Customs into Excises, etc. London, 1733, p. 27.

[1] *England's Interest: or Free Thoughts on the Starch Duty. Wherein is set forth the Advantages that will attend the Farmers and Landholders; and also some Observations relating to the Powder, and the Hardships and Inconvenience that the Barbers and Peruke-makers are subjected to thereby. Together with a Recital of what will be laid before the Parliament. Also an Address to his Royal Highness the Duke of Cumberland, relating to the Army. To which is added a Letter to a Member of the Honourable House of Commons. Dedicated to the Hon. Henry Pelham, Esq., First Lord Commissioner of his Majesty's Treasury.* By John Brooks. London, 1752. Similar ideas may be found in Brooks' earlier work *A short Treatise for reducing the Duty on Starch*, London, 1751.

[2] "Your Memoralists most humbly offer it as their opinion that the lowering the said Duties will necessarily promote the Consumption of the Starch, so as to increase this Branch of the Revenue considerably beyond its present Produce." — *England's Interest*, p. 19.

[3] *Op. cit.*, preface, p. iv, and pp. 30–31.

[4] *Op. cit.*, pp. 32–33.

head than all the prevailing arguments of the officer could do."

The chief controversy as to the advisability of the excise turned, however, on the question of its influence on the laborer, and more especially of its effect on the cost of labor. Mun and his followers, it will be remembered, maintained that, so far as taxes on consumption were taxes on the necessaries of life of the laborers, they would be shifted to the employers. Petty and his school, on the other hand, held that the excise on necessaries of life would rest on the workman. But while these latter writers agreed on the theory of incidence, they drew different conclusions according to their belief in the efficacy of high or of low wages. Most of the writers of the close of the seventeenth and the first half of the eighteenth century imagined that taxes on the necessaries of life would constitute a great stimulus toward an improvement in the condition of the laborer, in sobriety, carefulness and efficiency. A tax on labor would thus, they thought, be a real spur to industry and commerce, and a benefit to the community in general; for low wages mean low cost of production. When the necessaries of life are taxed, runs the argument, not only will the laborer have to work harder and longer to maintain himself, — which will be a benefit to him, — but, on the other hand, there will be a reduction in the labor-cost to the employer, which will be an advantage to the community. It was only very slowly that this belief in the efficacy of low wages was replaced by what we are to-day accustomed to call the theory of the economy of high wages. With it came a corresponding distrust of the policy of taxes on the necessaries of life. But both the advocates and opponents of the excise from this point of view based their practical conclusions on the same theory of incidence; namely, that a tax on necessaries would rest on the laborer.[1]

[1] A mention of a few of the writers discussed in the following pages may be found in Schulze-Gävernitz, *Der Grossbetrieb*, 1892, pp. 2–10, recently translated by O. S. Hall, under the title of *The Cotton Trade in England and on the Continent.* London, 1895. But he does not treat them at all from the fiscal

The earliest trace of the doctrine that high wages are bad not only for the laborer but also for the community is found in a work of Thomas Manley. He points out that high wages are the principal cause of England's inability to compete with Holland in the production of manufactures. At the same time, he contends, high wages do the laborer no good, because not only do "the men have just as much the more to spend in tipple, and remain now poorer than when their wages was less," but "they work so much the fewer days by how much the more they exact in their wages." [1] Another writer shortly after expresses very much the same view as to the "mischievousness" of high wages,[2] and suggests that an endeavor be made "to reduce the wages of our Manufacturers to a more sober and less expensive way of living."

Neither Manley nor his anonymous follower proposed the specific expedient of a tax on wages. Manley contented himself with stating in general terms that the chief concern of England was to "subdue our wages"; [3] and the anonymous writer recommended a rather drastic but indirect method to reduce wages.[4] But the theory, when once put forth, could

point of view. *Cf.* also the few words in Brentano, *Das Verhältniss von Arbeitslohn und Arbeitszeit zur Arbeitsleistung*, 1875; 2d ed., 1893, p. 57.

1 *Usury at Six per Cent. examined, and Found unjustly charged by Sir Tho. Culpeper and J. C. with many Crimes and Oppressions, whereof 'tis altogether innocent. Wherein is shewed the necessity of retrenching our Luxury and vain consumption of Forraign Commodities, imported by English Money: also the reducing the Wages of Servants, Labourers, and Workmen of all sorts, which raiseth the value of our Manufactures, 15 or 20 per Cent. dearer than our Neighbours do afford them, by reason of their cheap Wages, etc.* By Thomas Manley, Gent. London, 1669, p. 19.

2 "Handicraft Tradesmens high wages, which they exact for their work, is greatly mischievous, not only to every man who hath occasion to use them . . . but it is destructive to Trade, and hinders the consumption of our Manufactures by Foreigners." — *The Grand Concern of England explained; in several Proposals offered to the Consideration of the Parliament.* By a Lover of his Countrey and Well-wisher to the Prosperity both of the King and Kingdoms. London, 1673, p. 54.

3 *Usury at Six per Cent.*, p. 22.

4 His plan is "to enjoyn all English men not to wear anything but what is of our own Growth and Manufacturies; which will encrease a Consumption at home, and set those at work who now live idle, and by giving them full work, would bring down their wages." — *The Grand Concern*, p. 55.

not fail to draw attention to its obvious corollary. The demand for the use of the power of taxation as an instrumentality of social reform and the regulation of labor soon made its appearance — for the first time, perhaps — in the work of John Houghton.[1]

In the heading of the chapter devoted to this subject, Houghton lays down the principle "that this Kingdom will thrive more, and the Manufactors live better, and sell their Manufactures Cheaper when Provisions are Dear, than when Cheap."[2] His major premise is that "if there be of Food a Plenty, Laziness follows it."[3] When the workmen get high wages, they stop work and spend their earnings in debauchery. The ordinary laborer in England earns enough in three or four days' labor to support him the entire week.[4] If he had to pay more for his provisions, he would work harder and produce more.[5] Thus dearness would, in the end, bring about industry and plenty. Houghton therefore proposes, in order to maintain this artificial dearness, not only an export bounty on corn, but an increase of the excise on beer, ale and spirits, as well as the imposition of an "Excise of a groat a pound on Wool."[6] The effect of this will be, he thinks, that the "meaner sort of People will not

[1] *A Collection of Letters for the Improvement of Husbandry and Trade.* By John Houghton, Fellow of the Royal Society. London, 1681. The passages quoted are found in the second volume, London, 1683.

[2] *Ibid.*, p. 174.

[3] *Ibid.*, p. 175.

[4] "When the Frame-work Knitters, or Makers of Silk-Stockings had a great Price for their Work, they have been observed seldom to work on Mundays and Tuesdays, but to spend most of that time at the Ale-House and Nine-Pins. . . . The Weavers, 'tis common with them to be drunk on Munday, to have their Heads ach on Tuesday, and their Tools out of order on Wednesday. As for the Shoemakers, they'l rather be hang'd than not remember St. Crispin on Munday; and it commonly holds as long as they have a penny of Money or pennyworth of Credit." — *Ibid.* p. 177. His account of "most other Professions that live by Labour" is equally delectable.

[5] "If by the Dearness aforesaid the Manufactors cannot keep up their habitual Port by working three days in a Week, they will work four days, or find out Engines or new Contrivances equivalent." — *Ibid.*, p. 181.

[6] *Ibid.*, p. 183.

be diverted from better Employments"; but that "this part of their Provision will be dearer to them, and will oblige them to more Industry, whereby they will procure more Manufacture to sell cheaper."[1]

Petty himself, whose general theory on the incidence of taxation has already been explained,[2] in a subsequent treatise expressed views in substantial agreement with those of Houghton. He significantly heads the chapter in question "That some kind of Taxes and Publick Levies may rather increase than diminish the Wealth of the Kingdom."[3] He maintains that when the price of food is low, laborers can scarcely be procured at all,[4] and he accordingly recommends as extremely desirable a tax on the necessaries of life.[5]

The belief that an increased cost of living would be an incentive to industry is found in many of the writers of this period. Not all, however, desire to secure this artificial dearness through the medium of taxation. Thus, Sir William Temple thought that the troubles of Ireland could easily be remedied by "an Increase of People in the Country to such a degree as may make things necessary to Life dear, and thereby force general industry from each Member of a Family (Women as well as Men)."[6] In the same way another writer, soon after, sought to prove that "Labour is always dearest when Provisions are cheapest,"[7] and that an increase

[1] *A Collection of Letters for the Improvement of Husbandry and Trade*, p. 184.

[2] Above, p. 30.

[3] *Political Arithmetick.* By Sir William Petty. London, 1690, chap. ii.

[4] "It is observed by Clothiers and others, who employ great numbers of poor people, that when Corn is extremely plentiful, that the Labour of the poor is proportionably dear: And scarce to be had at all (so licentious are they who labour only to eat, or rather to drink)." — *Ibid.*, p. 45.

[5] Petty joins to this the further recommendation that in times of plenty the surplus food be sent to "publick Store-houses."

[6] *An Essay upon the Advancement of Trade in Ireland.* By Sir William Temple. Published in his *Miscellanea*, ed. 1693, part i, p. 116.

[7] *Some Thoughts on the Interest of Money in General, and particularly in the Publick Funds. With Reasons for fixing the same at a lower Rate, with Regard especially to the Landholders.* London, n.d. (published between 1728 and 1740). His argument is that "People in low Life, who work only for their daily Bread, if

in the price of necessaries will not injure the laborer, or increase the cost to the producer.

The general doctrine that taxes really conduce to thrift was, however, made more or less popular in England toward the end of the seventeenth century, by appeals to the experience of England's great rival, — the Low Countries. Not only did authors, like Temple,[1] continually call attention to the Dutch, but ample testimony to the great benefits supposed to result from the excise was found in the works of the Dutch writers themselves, whose ideas were made accessible to the English public through translation. Thus, the author of the celebrated *Political Maxims*, who was always, but erroneously,[2] supposed in England to have been the renowned Dutch statesman, John De Witt, advocates the imposition of excises on the laborers, because "it is evident that all the said ways for raising of Mony will excite the Commonalty to Ingenuity, Diligence and Frugality."[3]

This doctrine of the value of low wages continued far into the eighteenth century. One of its prominent advocates toward the middle of the century was the celebrated Josiah

they can get it by three Days Work in a Week, will many of them make Holiday the other three, or set their own Price on their Labour," p. 73.

[1] The following passage from Temple was much talked about: "The chief Fonds out of which this (Revenue) rises is the Excise and the Customs: The first is great and so general, that I have heard it observ'd at Amsterdam, that when in a Tavern, a certain Dish of Fish is eaten with the usual Sauce, above thirty several Excises are paid, for what is necessary to that small service." — *Observations upon the United Provinces of the Netherlands.* By Sir William Temple, London, 1673, p. 226; reprinted in *The Works of Sir William Temple, Bart.* London, 1720, i, pp. 70, 71.

[2] *The True Interest and Political Maxims of the Republick of Holland and West Friesland.* Written by John De Witt and other great Men in Holland. London, 1702. The original Dutch edition was published anonymously in 1662. The real author was Pieter De la Court. De Witt did indeed write one or two chapters, but not the ones in question. We now know precisely what he did write. *Cf.* Laspeyres, *Geschichte der volkswirthschaftlichen Anschauungen der Niederländer und ihrer Literatur zur Zeit der Republik.* 1863, pp. 18, 19.

[3] *The True Interest*, p. 109. In *An Essay on Trade and Commerce*, mentioned below, p. 53, note 2, the maxim is quoted on p. 49 in a little different language, and ascribed to De Witt. The erroneous ascription is also followed in Arthur Young, *The Farmer's Letters*, p. 29, and in Schulze-Gävernitz, *Der Grossbetrieb*, p. 3.

Tucker. Tucker turns his attention to "the lower Class of People" and holds that if they "are subject to little or no Controll, they will run into Vice: Vice is attended with Expence, which must be supported either by an high Price for their Labour, or by Methods still more destructive."[1] In England "the men are as bad as can be described: who become more vitious, more indigent and idle, in proportion to the advance of Wages and the Cheapness of Provisions."[2] Tucker then proceeds to discuss the plan of a "certain very ingenious Gentleman, and himself a great Manufacturer in the Clothing Way" to impose a special tax on the necessaries of life. This gentleman had observed "that in exceeding dear Years when Corn and Provisions are at an extravagant Price, then the Work is best and cheapest done: — but that in cheap Years, the Manufacturers are idle, Wages high, and Work ill done." "Therefore," adds Tucker, "he infers, that the high Duties, Taxes and Excises upon the Necessaries of Life are so far from being a Disadvantage to Trade . . . that they are eventually the chief Support of it: — and ought to be higher still, in order to oblige the Poor either to Work or Starve."[3]

Tucker observes that "Some Things may certainly be said in favour of this Scheme." But on mature reflection he is, as "an humane and compassionate man," a little doubtful about it,[4] and thinks that his alternative plans of encouraging immigration[5] and of raising the pecuniary limit of the elective franchise[6] may produce the same results and "keep

[1] *A Brief Essay on the Advantages and Disadvantages which respectively attend France and Great Britain, with Regard to Trade, etc.* By Josiah Tucker. 2d ed., London, 1750, p. 36. The third edition of 1753 is reprinted in Lord Overstone's *Select Collection of Scarce and Valuable Tracts on Commerce*, 1859.

[2] *Ibid.*, p. 37.

[3] *Ibid.*, p. 54.

[4] He even speaks of it as "a very singular scheme."

[5] The advantage of his "Naturalization" scheme is supposed to be "that by this means, the Price of Labour is continually beat down, Combinations of Journeymen against their Masters are prevented, Industry is encouraged and an Emulation excited." — *Ibid.*, p. 42. *Cf.* p. 91.

[6] As a consequence of raising the elective franchise to £200 for tradesmen,

down the Price of Labour and prevent any Combination." As a result of this "perhaps the morals of our Poor would be as unexceptionable and the Price of Labour as cheap as in any other trading country." Later, indeed, Tucker changed his opinions still further; for he not only became an advocate of a direct tax on luxuries,[1] but finally abandoned his whole contention as to the efficacy of low wages.[2]

The doctrine that wages do not rise with the price of provisions was also developed by several writers who objected to the restrictions on the exportation of wheat. They did not deny that prices would rise, but contended that high prices of food would mean more work rather than higher wages. Arthur Young, for example, not only states that "in no instance will you find that labour is high, because provisions are the same," [3] but he adds that "living must be rendered dear before that general industry, which can alone support a manufacturing people, will be rooted amongst them." [4] "High taxes," he continues, "must have operated to render high rates of labour necessary . . . in those countries where manufactures make the greatest shoots."

The most complete development of the doctrine that excises are a benefit to the laborers is found in the anonymous

"the privilege of voting would become a laudable Inducement to every Artificer (not to get Drunk, or take a paltry Bribe, as at present is the case) but to be frugal and saving. . . . The Number also of the Poor would consequently be lessened: the Price of Labour reduced." — *A Brief Essay*, pp. 52, 53.

[1] See below, pp. 86 and 61.

[2] *Cf. Josiah Tucker, Economist.* By W. E. Clark. Columbia University, 1903.

[3] *The Expediency of a Free Exportation of Corn at this Time: with Some Observations on the Bounty.* By the author of the *Farmer's Letters to the People of England.* London, 2d ed., 1770, p. 21.

[4] *Ibid.*, p. 28. The same ideas are expressed by Young in other works. So in *The Farmer's Letters to the People of England*, London, 1767, pp. 27–32, where he quotes approvingly the tract mentioned in the next note. So also in his *Political Arithmetic, containing Observations on the Present State of Great Britain and the Principles of her Policy in the Encouragement of Agriculture*, London, 1774, where he quotes Houghton's maxim that it is a good thing "to encourage the people to a high living." Young comments on this by saying: "The idea of encouraging the people to live high, is a very bold, but I believe a just one." — *Ibid.*, pp. 110, 111.

work of Temple, who wrote shortly before Adam Smith. A riot of the workingmen in London, due to a combination of high prices of food and a lack of work, took place in 1765. This led our author to publish a tract, in which he attempted to prove that high prices were beneficial to the laborers in that it stimulated their industry.[1] Five years later this tract was rewritten and published as a portly volume. In it he advances "the paradox that taxes tend to lower the price of labour," and states as a familiar truth that "when provisions are cheap, labour is always relatively dear." The three self-evident principles on which the whole work rests are summarized as follows: "First, that mankind, in general, are naturally inclined to ease and indolence, and that nothing but absolute necessity will enforce labour and industry. Secondly, that our poor, in general, work only for the bare necessities of life, or for the means of a low debauch; which, when obtained, they cease to labour till roused again by necessity. Thirdly, that it is best for themselves, as well as for society, that they should be constantly employed." [2]

Temple argues that as laborers are far more anxious to work when provisions are very dear, the augmented supply of labor at such times brings down the rate of wages. "A general industry is immediately created; workmen croud about the houses of master-manufacturers, begging for work, almost at any rate; and they work five or six days

[1] The title of this tract clearly explains its purpose: *Considerations on Taxes, as they are supposed to affect the Price of Labour in our Manufactures: also, some Reflections on the General Behaviour and Disposition of the Manufacturing Populace of this Kingdom; showing, by Arguments drawn from Experience, that nothing but Necessity will enforce Labour; and that no State ever did, or ever can make any considerable Figure in Trade, where the Necessaries of Life are at a low Price.* London, 1765, esp. pp. 29–31. Cunningham, *Growth of English Industry and Commerce in Modern Times*, p. 560, ascribes it to Temple. This William Temple was originally a clothier of Trowbridge, and must not be confounded with Sir William Temple, who entertained much the same views, but who wrote in the preceding century. See above, p. 49.

[2] *An Essay on Trade and Commerce: Containing Observations on Taxes, as they are supposed to affect the Price of Labour in our Manufactories: together with some interesting Reflections on the Importance of our Trade to America.* By the author of *Considerations on Taxes.* London, 1770.

in the week instead of three or four. Labour being a kind of commodity, the quantity then offered tends to the lowering its price; and would do so, unless art or violence intervened. Thus far the paradox is explained by experience; and thus far it is proved, that dearness of provisions tends to lower the price of labour in manufactories."[1] Temple then proceeds to prove the other side of the same proposition, that low prices of food lead to high wages and dear work. The experience of Holland, as usual, furnishes him with his strongest illustrations. He does not, indeed, go so far as to recommend any further increase of taxes on the laborer.[2] But he is at considerable pains to point out that the taxes thus far levied on the necessaries of life, whether in the shape of excises or of impost duties, have exerted none but a good influence on the laborers in particular and on the community in general.[3]

While the fullest exposition of this doctrine is found in the book just mentioned, the strongest and most aphoristic expression of the idea is contained in another work of William Temple,[4] with an extract from which our series of quotations may fitly close. Temple contends that "the only way to make the poor temperate and industrious, is to lay them under a necessity of labouring all the time they can spare from meals and sleep, in order to procure the common necessaries of life."[5] And after adverting to the experience of Holland,[6]

[1] *An Essay on Trade and Commerce*, p. 16.

[2] *Ibid.*, pp. 282–286.

[3] "Of what infinite consequence then is it," he exclaims in another place, "that some method should be found out to enforce labour, and to procure habits of sobriety and industry among the manufacturing populace." — *Ibid.*, p. 31. *Cf.* also pp. 22 *et seq.* of the original tract of 1765.

[4] *A Vindication of Commerce and the Arts, proving that they are the Source of the Greatness, Power, Riches and Populousness of a State.* By I. B., M.D. [William Temple]. London, 1758. The tract has been reprinted in Lord Overstone's *Select Collection of Scarce and Valuable Tracts on Commerce.* London, 1859.

[5] Overstone's *Select Collection*, p. 534.

[6] "Wages in Holland are low in proportion to the price of necessaries, everything being excessively taxed; the people from hence are exceedingly industrious." — *Ibid.*, p. 532.

he concludes that the best way is "to raise a fund by a tax on necessaries in a time of plenty."[1]

In the face of the virtual unanimity of opinion of this considerable number of authors, it would seem difficult for the contrary view to make any converts. Nevertheless, although it was not at first a popular doctrine among economic writers, the theory that low wages are not necessarily a benefit to a country, and that taxes are not needed to reduce the cost of labor, gradually made headway in scientific and commercial circles.

Perhaps the earliest writer to deny the theory that low wages are good for a country was Josiah Child. In a controversy with Manley he takes exception to the statement that "it is the Dearness of Wages that spoils the English Trade." Child lays down the principle that "wherever Wages are high universally thro'out the whole World it is an infallible evidence of the Riches of that Country: and wherever Wages for Labour runs low, it is a proof of the Poverty of that Place."[2] The attempt to lower wages, he continues, can have only injurious results, and leads to an emigration of the people to countries where higher wages are paid.[3] "It is true," says Child, "our Great Grandfathers did exercise such a Policy of endeavoring to retrench the price of Labour by a Law (although they never could affect it); we are since, with the rest of the Trading World, grown Wiser in this matter, and I hope shall so continue."[4] At the same time, Child does not seem to have abandoned the old theory that high prices of food are good for the workman. In another passage he discusses the influence of dear food

[1] Overstone's *Select Collection*, p. 516.

[2] *A Discourse about Trade, wherein the Reduction of Interest of Money to 4 l. per Centum is Recommended*, etc. [By Josiah Child.] London, 1690, Preface, pp. 11, 12. In 1693 a textual reproduction of this work, barring the omission of "The Publisher to the Reader," appeared under the title *A New Discourse of Trade wherein is recommended several weighty Points*, etc. In the second edition of 1693 and all subsequent editions this title is repeated.

[3] "If we retrench by Law the Labor of the People, we drive them from us to other Countries which give better Rates."—*Ibid.*

[4] *Ibid.*, p. 13.

on industry very much in the style of the older writers.[1] He even goes so far as to speak about excises as conducing to thrift.[2] So that Child can scarcely be considered an opponent of the older theory so far as concerns its application to finance.

The clearest of the early writers to prove the economy of high wages was John Cary, whose views on another point have already been mentioned.[3] Cary puts the problem as follows: "Whether the Price of Labour discourages our Manufactures or hinders Improvements in our Product?" He solves the problem by stating "that both our Product and Manufactures may be carried on to advantage without running down the labour of the Poor." He then proceeds to state his argument under two heads. First, as regards the productions of the soil, says Cary, it should be remembered that nominal wages must vary with the price of food.[4] Therefore a reduction of wages implies a lowering of prices;

[1] "The Poor live better in the dearest Countries for Provisions, than in the cheapest, and better in a dear year than in a cheap, (especially in relation to the Publique Good), for that in a cheap year they will not work two days in a week; their humour being such, that they will not provide for a hard time ; but just work so much and no more, as may maintain them in that mean condition to which they have been accustomed." This passage was first printed in Child's earlier work: *Brief Observations concerning Trade and Interest of Money.* By J. C. London, 1668, p. 11. It is reproduced in the *Discourse about Trade*, on p. 19 of the portion entitled "A Discourse concerning Trade." It also appears in the later editions.

[2] "The Abatement of Interest conjoynt with Excises upon our home consumption are two of the most comprehensive and effectual Sumptuary Laws that ever were established, and most necessitating and engaging any People to thriftiness, the high Road to Riches." — *A Discourse about Trade*, p. 27 of the part entitled "Trade and Interest of Money considered." It was probably these passages that caused Arthur Young in his *Farmer's Letters*, p. 29, to mention Child as having "concurred in the same observations" that he made. See above, p. 52.

[3] See above, p. 40.

[4] "As for the first, our Product, I am of opinion that the running down the Labour of the Poor is no advantage to it, nor is it to the Interest of England to do it, nor can the People of England live on such low Wages as they do in other Countrys; for we must consider that Wages must bear a Rate in all Nations according to the prices of Provisions." — *An Essay on the State of England*, etc. By John Cary. Bristol, 1695, p. 144.

and lower prices involve a diminution in the value of land. "You cannot fall Wages unless you fall Product, and if you fall Product, you must necessarily fall Land."[1] Secondly, as regards manufactured articles, he continues, people have only to look at them, to see that prices have been continually falling without any corresponding decrease in wages.[2] "But then the question will be, how this is done? I answer, It proceeds from the Ingenuity of the Manufacturer, and the Improvements he makes in his ways of working." He then proceeds to show how machinery effects this result,[3] and concludes that "New Projections are every day set on foot to render the making of our Manufactures easie, which are made Cheap by the Heads of the Manufacturers, not by falling the Price of poor Peoples Labour."[4]

Although this most suggestive passage shows how old are some of the most modern views on industry, for some time comparatively little application of them was made to problems of taxation. We do, indeed, find in the ensuing decades some incidental allusions to the impolicy of taxing wages. Thus, one interesting writer states that "the labour of the meaner sort of people is of too great consequence to a trading Nation to be any way slighted or disregarded."[5] A

[1] *An Essay on the State of England*, p. 145.

[2] "Observation, or Experience of what hath been done, we have and daily do see that it is so; the Refiners of Sugar lately sold for Six Pence per Pound what yielded twenty Years since Twelve Pence; the Distillers sell their Spirits for one third part of what they formerly did; Glass Bottles, Silk-Stockings and other Manufactures, (too many to be enumerated) are sold for half the Prices they were a few Years since, without falling the Labour of the Poor." — *Ibid.*

[3] "All which save the Labour of many Hands, so the Wages of those imployed need not be lessened." — *Ibid.*, p. 146.

[4] *Ibid.*, p. 147.

[5] This pamphleteer was opposed to the employment of foreigners. After showing the advantages of employing home workmen, he proceeds: "and since the very meanest under-workers in Wool contribute in some measure towards the support of the State, and the movement of the great wheels of Trade; it seems a peculiar hardship upon them, as well as inconsistency in the management of affairs here, first to put them under a necessity of raising their Wages, by taxing many of the necessaries of life; and afterwards to make the dearness of their labour, occasion'd by those Taxes, the very ground and reason of discouraging, or declin-

few years later, Nugent states emphatically: "one thing is certain, that no good can be produced by taxes upon commodities. They may starve the industrious, but they never will induce the idle and extravagant to labour and to save." [1] In the second quarter of the eighteenth century, however, a more vigorous attack was made on the premises as well as on the conclusions of the partisans of the excise.

Among the most important of these writers was Vanderlint. At first sight, he seems to maintain that prosperity can be attained only through a reduction of wages.[2] Yet, notwithstanding the fact that he demands an abolition of taxes on necessaries for this reason,[3] Vanderlint is in reality a strenuous advocate of higher remuneration for the workman. The lowering of wages at which he aims is merely a seeming reduction due to the abolition of taxes and to an increase in the money supply. Prices, he thinks, will fall still more,[4] which of course means a relative rise in wages.[5] Vanderlint is, in fact, a strong believer in the theory that a high standard of life for the laboring population is much to be desired.[6] He

ing to make use of English hands, and of employing foreign (as in this view we must account Irish) hands in their stead." — *The Grasiers' Complaint and Petition for Redress: or the Necessity of Restraining Irish Wool and Yarn; and of Raising and Supporting the Price of Wool of the Growth of Great Britain consider'd.* By a Lincolnshire Grasier. London, 1726, pp. 44, 45.

[1] *Considerations upon a Reduction of the Land Tax.* [By Robert Nugent.] London, 1749, p. 17.

[2] "Reducing the present Rates of Labour appears to me absolutely necessary to increase . . . Trade." — Preface to *Money answers all Things: or, an Essay to make Money sufficiently Plentiful amongst all Ranks of People, and Increase our Foreign and Domestick Trade, Fill the Empty Houses with Inhabitants, Encourage the Marriage State, Lessen the Number of Hawkers and Pedlars, and in a great measure, prevent giving long Credit, and making bad Debts in Trade.* By Jacob Vanderlint. London, 1734.

[3] "I do verily believe that taking the Taxes intirely off the Things the working People consume is so absolutely needful, that Labour can hardly be reduced without it." — *Ibid.*, p. 159.

[4] This is shown, among other things, by the title of the work. It was this grievous error about money which served to consign the book to oblivion, notwithstanding its many good points. [5] *Ibid.*, pp. 34, 69, and esp. 86, 87.

[6] Among the reasons advanced is that higher wages will conduce to better work: "The working People can and will do a great deal more Work than they

is even the first writer to advance a doctrine that has only recently come into prominence — the doctrine that as the laborers form the mass of consumers, the large consumption which gives the impetus to profitable production and general prosperity itself depends on the purchasing power of the consumers, — that is, on the high wages and the high standard of life among the laborers.[1]

Twenty years later, Nickolls [Dangeul] went to the root of the matter when he stated,[2] "We have flattered ourselves too much, if we have believed that on augmenting the taxes upon the consumption, we should bring our workmen to the sobriety, or frugality of a Frenchman, who lives, or rather starves, upon roots, chestnuts, bread and water; or to the thriftiness of a Dutchman, who contents himself with dried fish, and butter-milk. When our workmen can no longer raise the price of their work to their mind, there still remain two great refuges to them from labor, the Parish and Robbing." [3]

The most popular exponent of the newer doctrine was Postlethwayt. In a passage which is practically a plagiarism of the one just quoted from Dangeul, Postlethwayt objects to taxes on the mass of consumers.[4] It is true, indeed, he says,

do, if they were sufficiently encouraged. For I take it for a Maxim, that the People of no Class will ever want Industry, if they don't want Encouragement." — *Ibid.*, pp. 122, 123.

[1] He objects to any scheme for "making the Poor fare harder, or consume less than their reasonable Wants in that Station require; for they, being the Bulk of Mankind, would in this Case affect the Consumption of Things in general so mightily, that there would be a Want of Trade and Business amongst the other Part of the People." — *Ibid.*, p. 69, note. (In reality this should be page 61, as the headings of pp. 65–72 are printed twice by mistake.) *Cf.* p. 81.

[2] *Remarks on the Advantages and Disadvantages of France and of Great Britain with Respect to Commerce.* 1754. See above, p. 44, note 1.

[3] *Ibid.*, pp. 261, 162.

[4] "Augmenting Taxes on our Consumption, has not brought our Workmen to the Sobriety or Frugality of a Frenchman or to the Thriftiness of a Dutchman: and when our Workmen cannot raise the Price of their Labor and Workmanship to the Degree they would, they have recourse to the Parish or Robbery." — *Great Britain's True System.* By Malachy Postlethwayt, Esq. London, 1757, p. 160. For the full title, see the bibliography.

that wages are fixed by the price of food.[1] But the increase of wages due to a tax will increase, not decrease, the cost of production, and will put the country at a disadvantage in competition with foreigners. The result will be the ruin of the whole community, of course including the laboring class. An artificial rise in wages through taxation, in his opinion, gives "superaddition of value" to the country's products, which can only be harmful to all concerned.[2] But, as he points out in another work, high wages and leisure for the workman, when created by natural causes, are the surest guarantee of good work and bountiful production.[3] Massie, another popular writer of the same period, expressed a similar conclusion very forcibly in the title of a work designed to prove that the excise would be a "pinchbelly tax" to the workingmen.[4]

The point could not have been put more plainly than by Nathaniel Forster, who pours out the vial of his wrath upon those persons who have "the hardiness to assert that high taxes upon the necessaries of life contribute in their consequences even to the more plentiful production of them and that the poor will be industrious only in the degree that they are necessitous."[5] Forster terms this "a doctrine which

[1] "Where Food and Cloathing, the Necessaries for a Day, are purchased for a little, there Wages will be low, or Labor Cheap."—*Great Britain's True System*, p. 144.

[2] "When the general Price of Labor soars above its natural Standard, and thereby an artificial Value is superadded to our Produce and Manufacture, beyond which our Rivals do, we must lose our Dominion in Trade; and our Ruin then cannot be far distant: and this Superaddition of Value to our Commodities arises solely from the *Modus* wherein our Taxes are laid and raised."—*Ibid.*, p. 158.

[3] *The Universal Dictionary of Trade and Commerce.* London, 1751, vol. i, Preliminary Discourse.

[4] *Reasons humbly offered against laying any further tax upon Malt or Beer, shewing that such a tax would not only cause great Losses to the Landholders of England, but be prejudicial to several branches of our Manufactures, and prove a pinchbelly Tax to some hundred thousand Families of Labouring People.* By J. Massie. London, 1760. For other views of Massie, see below, chap. iii.

[5] *An Enquiry into the Causes of the Present High Price of Provisions. In Two Parts: I Of the General Causes of this Evil; II Of the Causes of it in some particular Instances.* [By Nathaniel Forster.] London, 1767, p. 49.

avarice in private life has greedily seized, and has not failed to improve to its own purposes." "But it is a doctrine," he adds, "as false, as it is inhuman."[1] He proceeds to show that it is necessarily false; for, says he, if harder work means lower wages, taxes will lead not to industry, but to the reverse.

This marked the turning-point in the controversy. Some authors, like Tucker, were now convinced that their previous views had been erroneous. Tucker, in fact, wrote a special tract designed to prove that countries where high wages are paid can successfully compete with those in which the rate of wages is low.[2] Higher wages, says he, do not necessarily imply greater cost of production, for the larger remuneration of the laborer is compensated by his greater skill. "Is it not much cheaper," asks Tucker," to give 2*s.* 6*d.* a Day in the rich Country to the nimble and adroit Artist, than it is to give only 6*d.* in the poor one, to the tedious, aukward Bungler."[3] In the same way Schomberg expresses the newer theory in the statement that "labour in a country of low wages is comparatively dearer, than where wages are high;"[4] and the American Webster pokes fun at the old doctrine.[5]

Thus we see that in the third quarter of the eighteenth century the belief that taxes on labor would benefit the community by acting as a spur to industry was seriously shaken. When this doubt was reinforced by the more general theory already discussed,[6] that taxes on the poor are a hardship for

[1] *An Enquiry into the Causes of the Present High Price of Provisions*, p. 55.

[2] *Four Tracts on Political and Commercial Subjects.* By Josiah Tucker, D.D. 2d ed., 1774. Tract I: "Whether a rich Country can stand a Competition with a poor Country (of equal natural Advantages) in raising of Provisions and Cheapness of Manufactures."

[3] *Ibid.*, p. 34.

[4] *Historical and Political Remarks upon the Tariff of the Commercial Treaty: With Preliminary Observations.* [By A. C. Schomberg.] London, 1787, p. 156.

[5] "I have heard a stupid and cruel argument urged, that taxing labor has this advantage that it promotes industry because it increases necessity. This argument proves in a very cogent manner, that it is best to make everybody poor, because it will make them work the harder." — *A Sixth Essay on Free Trade and Finance.* By a Citizen of Philadelphia, 1783. Reprinted in *Political Essays.* By Pelatiah Webster. Philadelphia, 1791, p. 239.

[6] See above, pp. 40–43.

them, whatever be the result on the community at large, the day of complete confidence in the excise had gone by. The point to be emphasized is that the advocates, as well as the opponents of the excise,[1] agreed as to their theory of incidence; and that some defended, while others objected to, this system of the taxation of necessaries precisely because, in their opinion, it rested on the poor. Their general doctrine of incidence, in short, was that the excise rests on the mass of the consumers.

3. *The Excise is shifted to the Landowners*

As compared with the writers discussed in the previous section, there were few who maintained that the incidence of the excise as such is on the landowner. There were, indeed, some influential thinkers who held that all taxes are shifted to the land.[2] But the special doctrine which singled out excises as the particular taxes that finally rest on land met with comparatively little support.

Probably the first writer to advance this theory was an anonymous pamphleteer of the last decade of the seventeenth century. He is concerned especially with "a Home-Excise upon things eatable and drinkable, and several other Merchandizes which are sold in the Market." [3] The ordinary statement that an excise, which he calls "a troublesome and slavish sort of Tax," [4] rests on the consumer is declared by him to be an error. For example, the more the farmer has to pay for the commodities of his own consumption, says he, the less he will be able to pay as rent.[5] The farmers and the land-

[1] With the exception of Vanderlint, whose attitude is explained below, p. 107.

[2] See below, chap. v.

[3] *Some Considerations about the most proper Way of Raising Money in the Present Conjuncture.* London, n. d., *circa* 1692, p. 15.

[4] *Ibid.*, p. 27.

[5] "The common argument for an Excise, That it will spare our Lands; is grounded upon a false Supposition: This is not a sparing our Lands, but a charging them for ever with double what is needful. The dearer the Farmer pays for his Commodities, the less Rent he will pay; and the less his Product yields him

owners, moreover, will be the only ones to suffer. For if a tax be imposed on some of the farmer's own products, as for instance on malt, he will have to bear the greater part or the whole of the tax, because otherwise there would be a considerable falling off in the demand and a consequent diminution of price. The brewers will be the real gainers, for they will get their raw material cheap and will sell the finished product at the old price.[1] The author, it thus appears, is not very clear in explaining why a tax would cause the price of manufactured articles to rise, but would have no such effect on agricultural products.

Another writer of the same period makes the statement that "A General Excise upon Home Commodities is a real Land Tax, and will have the same Influence upon the Value of Lands and Rents, as that we call a Land Tax, or Monthly Assessment hath."[2] He is aware of the general principle that prices fall with the increase of supply;[3] but he thinks that the supply of commodities in England is so great that the market is at the mercy of the purchaser.[4] A tax on com-

clear, accordingly he must value his Farm. The more (for example) is laid on Lead, the less will Woods and Oar yield; and so of other Commodities." — *Ibid.*, p. 28.

1 "It is evident, this Tax will fall very hard everywhere upon the poor Farmers; and those who are best able to pay it, will be most spared: For example, if an Excise should be laid upon Malt, where will the Burden lye? The price of it will certainly sink in the Countrey, for want of Consumption, by reason of the new Imposition. The Brewers in great Cities and Towns . . . will be the only Gainers, since they will buy their Malt cheap, and sell their drink as dear or dearer than before. And the poor Farmer will bear the loss." — *Ibid.*, p. 29.

2 *An Essay upon Taxes, calculated for the Present Juncture of Affairs in England.* London, 1693, p. 10. The copy in the possession of the present writer is ascribed by its former possessor, but probably without reason, to Sir William Temple. Others ascribe it to the Marquis of Halifax.

3 "If the Necessity of the Buyer be greater than the Seller, the Market will rise; but if that of the Seller be greater than the Buyer, the Price of Commodities must fall; and any Duty laid upon Commodities will lye upon either accordingly." — *Ibid.*, pp. 10–12.

4 "But as to the present Case in England, I think that there is nothing more apparent, than the Plenty of Home Commodities, and the want of People to consume them . . .; the consequence of which necessarily will be, That whatever Duty is impos'd upon the Commodity, the Buyer will have it so much the cheaper." — *Ibid.*, p. 12.

modities, therefore, must fall on the producer or seller; and, since everything is a product of the land, a tax on products is a tax on land.[1]

At the time of the controversy over Walpole's excise scheme, we find the same views in a number of pamphlets designed to show the injurious consequences of the tax. Of these, the ablest are by Pulteney[2] and Amhurst.[3] Few of these writers distinguish, in their discussions of the incidence of the tax, between the landlord and the farmer who rents the land. One writer, however, goes into the question a little more fully. He maintains that just as a land tax levied on the occupier or farmer is shifted to the owner of the land,[4] so an excise tax, — for instance on salt, — even though it reach the farmer, is ultimately paid by the landlord through a fall in rent.[5] Even assuming, however, that the excise is shifted to the poor consumer, he will not suffer in the long run. For if the excise takes the place of the land tax, the landlord will have more to spend "in Hospitality" as well as

[1] "A general Excise and a Land Tax differ not essentially, since both are a Duty upon the same Commodities, which are the Product of Land." — *An Essay upon Taxes, etc.*, p. 11. As the object of the author is to diminish the burden upon land, he therefore favors a general property tax. See below, chap. iv.

[2] *The Case of the Revival of the Salt Duty fully stated and considered with some Remarks on the Present State of affairs, in answer to a late Pamphlet intitled a Letter to a Freeholder on the Reduction of the Land Tax to one Shilling in the Pound.* In a Letter from a Member of the House to a Gentleman in the Country. [By William Pulteney.] London, 1732. The author quotes Locke's statement that all taxes fall on land, but adds: "I could cite a great deal more to the same Purpose . . . ; but I chuse to decline it, lest I should be represented as an Advocate for Land Taxes; whereas my great Desire is that our Taxes in general may be lessen'd." — p. 49. *Cf.* his views as to the effect of taxes on necessaries and wages, p. 54.

[3] *An Argument against Excises, in several Essays lately published in the Craftsman, and now collected together.* By Caleb D'Anvers of Gray's Inn, *Esq.* [Lord Nicholas Amhurst.] London, 2d ed., 1733. See especially pp. 67 and 76.

[4] "Tho these Charges are paid immediately by the occupier, yet they fall ultimately on the Landlord; who is obliged on these accounts to let his Land so much the cheaper." — *The Case of the Salt-Duty and Land-Tax offered to the Consideration of every Freeholder.* London, 1732, p. 10.

[5] "It is a Tax that does not affect the Farmer, for he hires his Land the cheaper of his Landlord." — *Ibid.*, p. 11.

in the "Improvement of his Estates"; and the laborer will be the person to reap the benefit.[1] The honesty of our author's statements, as well as his logic, is, however, open to criticism; for while the other writers object to the excises because they affect the landed interest, he is strongly in favor of the scheme, while at the same time he is strenuously opposed to any increase in the land tax.[2]

The view that particular excises are ultimately borne by the landowner was quite common later on.[3] Even as late as 1790 we are told that the trend of opinion was against the malt tax chiefly for the reason that "the tax was partial against the landlord, on whom it would ultimately fall, and who should afterwards be relieved of his burden."[4] And Adam Smith himself found it necessary to argue that an excise on malt would not affect "the rent or profit of barley land."[5] It is perhaps as a reflex of this tendency in theory that we find similar ideas expounded by a Scotch writer who, in referring to the recent vigorous enforcement of the excise on ale, drew a close connection between the falling off in the consumption of ale and the decrease in the price of farms."[6]

[1] If the dealer pays the duty, he shifts to the consumer. "Who is then the Sufferer. If anybody, it is the Labourer: but it will be found that he has no reason to complain." — *Ibid.*, p. 13.

[2] The land tax he calls a "partial tax," for "every one knows that Personal Estates are seldom or never charged: for Money is of a transitory Nature; it shifts so often from Place to Place, and Person to Person, that 'tis impossible to know where, or in whose hands to charge it." — *Ibid.*, p. 9. Furthermore, it is in his opinion very unequal in different parts of the Kingdom. *Cf.* p. 16. He proposes accordingly a freeing of the land, and thinks that "it might be done by laying a Tax, either on one or two Species of Commodities in common use, or on some favourite vanities of Mankind." — *Ibid.*, p. 17.

[3] See, *e.g.*, the views of Davenant on the malt tax, *infra*, chap. v.

[4] *An Enquiry into the Principles of Taxation*, 1790, p. 138.

[5] *Wealth of Nations*, book v, ch. ii, pt. ii, art. iv.

[6] *A short View of the Prejudice arising both to the Country and Revenue from the Imposition on Ale and Beer granted to the City of Edinburgh and other Boroughs in Scotland humbly submitted to the Consideration of the Proprietors and Farmers of Land, etc.* Edinburgh, 1748, p. 5. *Cf.* for a somewhat similar view the interesting tract entitled *The Case of the County of Devon with respect to the Consequences of the new Excise Capital Duty on Cider and Perry.* London, 1763.

4. *The Excise rests on the Traders*

Our survey of the different views held as to the excise would not be complete without mentioning those writers who maintained that the tax was not shifted at all, but rested on the merchant who originally paid it. The first appearance of this doctrine is found shortly after the imposition of the excise in the seventeenth century, when an ostensible representative of a group of women-workers voiced her complaints on this score in a most remarkable poetical effusion.[1]

A few years later, however, a writer of the sterner sex treats the subject more seriously from the same point of view, but with some new arguments. The trader, he thinks, suffers from the excise in several ways. In the first place, when the goods are imported he advances the money, and thus renders necessary the employment of a large capital, which, moreover, is frequently lost by the failure of the creditor to discharge his obligation.[2] In addition, not only does the in-

[1] *The Good Womens Cryes against the Excise of all their Commodities. Shewing, As the businesse now stands, they are in no Case able to bear such heavy Pressures and insupportable Burthens, occasioned by the Juncto's new Impost on their Wares, whereby they are like to fall into great want of Trading, and putting off their Commodities at the prices formerly, to the utter undoing of their deare Husbands and Families for ever. Therefore having a Fellow-feeling of one anothers lamentable and languishing Cases, (notwithstanding any Act to the contrary) have put forwards themselves to seeke redresse of their aggrievances, and inabilities of their overburthened Husbands insufficiencies and unsatisfying performances in their severall Occupations; have convened together in a Feminine Convention in Doe-little lane, and tendred their aggrievances and complaints to the consideration of the Commonwealth; desiring speady redresse therein.* Written by Mary Stiff, Chairwoman, in Vinegar Verse. Westminster: Printed at the Signe of the *Mornes* in Queen-Street, neere my Lord *Fairfax's* House, and are to be sold at the *Dildoc* in *Distaffe*-Lane, 1650.

[2] "The charge on goods being so great, those that Trade in Wines, Tobacco, Salt, and other such goods, must have double the Stock that otherwise their Trade would require. . . . The Excise of Wine, Salt, Tobacco and all Goods, are paid by the Importer, who often trusteth both his Stock, disbursed for buying the Goods in Forraign Parts, and the Customes and Excise on them, and looseth all, both principal and cost, by the failing or inability of his Creditor." — *Trades Destruction is Englands Ruine or Excise decryed. Wherein is manifested the Irregularity and Inequality of raising money by way of Excise to defray the Charge of the Nation.* By W. C., a Lover of his Country. London, 1659, p. 6.

crease of the price due to the tax restrict the market, but the height of the tax is such that the merchants fear to add the whole amount to the price, thus involving them in a double loss.[1] Finally, the excise leads to great frauds and evasions, all of which "much spoileth the current of Trade."[2] Hence the author, after exclaiming: "take notice into what desperate poverty the late Ruler and his Confederates have brought the Nation by imposing burthens on Trade,"[3] adjures his countrymen to return to "the good old way and practice of our Ancestors" and rely for revenue upon the property tax.[4]

During the seventeenth century these isolated sporadic arguments had little weight. The doctrine, however, was again put forward with especial emphasis at the time of Walpole's excise scheme by its opponents, who were desirous of marshalling every possible argument against the plan.

One of the most vehement pamphleteers, for instance, objects to the "bondage merchants suffer," after exposing themselves to the dangers of the sea, and after paying import duties, "by not being permitted to deliver their Goods after Sale without paying an imposed Penalty by Way of Excise."[5]

[1] "The extraordinary charge of goods not only hindereth the expence of greater quantities, in regard of the great prizes; but also often enforceth the merchants to sell cheaper, considering the charges on them, then otherwise they might do." — *Trades Destruction, etc.*, p. 7.

[2] "Those that make little conscience of Oaths or lying, that have little Estates to lose, and that are subtile and politick, find ways to save the Custome and Excise, which is high, and so sell cheaper than those that are able and plain in dealing can do." — *Ibid.*

[3] *Op. cit.*, p. 8.

[4] During the Commonwealth the excise laid upon imported goods was administered in connection with the customs. The complications due to this connection led to a wordy warfare which is reflected in three pamphlets of the year 1653: *Quaeries Touching Reducement of the Excise to the Customes;* Jeremiah Watts, *An Answer to Quaeries Touching Reducement of the Excise to the Customes;* and *A Whippe for the Custome-house Curre or a Survey of Jeremiah Watts his scurrilous Pamphlet.*

[5] *Excise anatomiz'd. Declaring that unequal Imposition of Excise to be the only Cause of the Ruin of Trade, the universal Impoverishment, and destructive to the Liberties of the whole Nation.* By Z. G., A well-wisher of the common good. London, 1733, p. 5.

The dealer, he contends, is thus made to suffer all manner of delay and inconvenience, and often loses the chance of a sale. He discusses, in picturesque language, nine objections to the excise,[1] and finds that it errs most grievously "by the disproportionableness and inequality of its Imposition, by laying the greatest Weight and Burthen on the Back of Trade, thereby utterly disheartening the most ingenious and industrious Party."[2] He is not weary of speaking of the tax as "that detestable and so often damned Imposition of Excise."[3] The vehemence of the writer's language in describing the nine inequalities of the excise is paralleled in English literature only by the author (who signs himself Thrasybulus) of a much later work which paints in lurid colors the thirty-three defects of the excise.[4]

[1] He speaks of the excisemen as those "who like ravenous wolves (using the Law of Excise for their Sheep's Cloathing) will not satisfy their insatiable Appetites with less than the greater Part (of the merchants' property)." — *Excise anatomiz'd*, p. 6. He speaks of other officials as "those deformed Monsters of this Age, cloak'd with the Name of Farmers of the Excise, whose insolent Vileness, and exhausting Oppressions, transcends all former Ages." — *Ibid.*, p. 9.

[2] *Ibid.*, p. 4. "The Merchant and Trader," he adds elsewhere, "stands in as much Fear of the Excise-Man, as the Welsh Traveller did of his Host, when being at Supper, and finding amongst his Eggs, one with a chick in it, hastily supp'd it up, for fear, lest his Host seeing it, might make him pay a Groat for it." — *Ibid.*, p. 9.

[3] *Ibid.* p. 19. As its consequence "all our former flourishing Tranquility is become a Skeleton of Dry Bones." — p. 11. Much the same point of view is represented in *A Letter to the Merchants and Tradesmen of Great Britain, particularly to those of London and Bristol, upon their late glorious Behaviour and Happy Success in opposing the extension of the Excise-Laws, with a few Seasonable Cautions and something More, which it is hoped will be agreeable to every true Englishman.* By Eustace Budgell, Esq. London, 1733. The same is true of *Remarks upon a Pamphlet entitled Considerations occasioned by the Craftsman upon Excise.* London, 1733.

[4] Cf. *Six Letters on Excise, and particularly on the Act passed in 1789, for subjecting the Manufactures of and Dealers in Tobacco and Snuff to the Laws of Excise.* London, 1790. From the ninety-two pages of invective the following may be quoted as samples, although no attempt is here made to reproduce the reasoning. The proposition for the excise is "dangerous, oppressive and unconstitutional," "alarming," "subversive of freedom," "fraught with impolicy," "inconsistent with political wisdom and equity," "pregnant with danger," "replete with blindest folly and indiscretion," "of essential injury to piety and

Another controversialist, Amhurst, who writes under the pseudonym of D'Anvers, tried to cover two positions. He did not deny that excises were shifted to the consumer, but he contended that they hurt the trader as well. "Will this Gentleman pretend," he said, referring to an opponent, "that Taxes bring no Burthen, no Difficulty or Loss upon the Trader, by taking the Money immediately out of his Pocket, which He could otherwise emply to great Advantage, and giving a Check to the Circulation of his Trade."[1] Amhurst laid down his general conclusion in the words "Taxes on Trade have already deprived us of some valuable Branches of it."[2]

It may be queried, however, whether Amhurst really meant anything more than that taxes on trade are frequently injurious to the general interests of commerce — an opinion, common enough in the writings of the seventeenth century, which can be found well expressed in the celebrated work of Lewes Roberts.[3] But the more precise question as to the exact incidence of taxes on trade was more fully discussed in

religion," "perpetually inimical to happiness," "a glaring violation of sacred principles," "impervious in its spirit and troublesome in its operation," "conspicuous for inhumanity," "a source of great mortification and irretrievable disadvantage," "an unparalleled oppression," "unjustly rigorous and meanly ensnaring," "in an eminent degree ridiculous and contemptible," "totally inadmissible," "precipitate and unnecessary," "utterly inexpedient," "fundamentally improper," "in no measure adequate to the end proposed," "rash and impolitic," "essentially hostile to the fair trade," and "permanently disadvantageous to the revenue." See esp. pp. 1–22.

[1] He adds: "It is the Plenty, or Scarcity of any Commodity, in Proportion to its Vent and Demand, which must always rule in these Cases, and by which the Trader will make more or less Profit in his Dealings." — *The Second Part of an Argument against Excises; in answer to the Objections of several Writers.* By Caleb D'Anvers [Lord Nicholas Amhurst]. London, 1733, p. 19.

[2] *Ibid.*, p. 20. See also p. 41.

[3] "When the customes upon Merchants goods is small, it easily draweth all nations to trade with them; and contrariwise, where great impositions are laid upon Merchants goods the traffike of the place, will be seen soone to decay, to the prejudice of that place and Kingdom." — *The Treasure of Traffike, or a Discourse of Forraigne Trade. Wherein is shewed the benefit and commoditie arising to a Common-Wealth or Kingdome, by the Skilfull Merchant, and by a well ordered Commerce and regular Traffike.* By Lewes Roberts, Merchant and Captaine of the City of London. London, 1641, p. 61.

connection with the duties laid on colonial sugar. It may be interesting to mention a few of these writers, all of whom maintain that the tax rests on the seller or sugar-planter.

The clear-headed author of one seventeenth-century tract declares the assertion that the new sugar duty will be paid by the buyer "a meer Mockery." For, "if an Impost be laid upon the Sugar, whoever pays it the Planter is sure to bear it. What avails it though the Buyer pays the Duty, if the Seller must presently allow it in the Price." [1] Where the price of the article is practically fixed, he adds, as in the case of beer, the brewer can easily add the tax to the price. But where "the Price is uncertain, and a Bargain is to be driven, and a Duty yet to be paid," the matter is very different. For competition will compel the seller to take less.[2] The general principle, he thinks, can be put as follows: "'Tis not Impositions, but Plenty and Scarcity, that rules the Market. And it is found by constant Experience, that where an Impost is laid upon a Commodity in demand, there the Buyer may be brought to bear some part of it. But if the Market be glutted, and the Commodity be a Drug (as Ours is, and for ever will be); in this case the Buyer will bear no part of the Duty, but the Seller must pay it all." [3]

In the fifth decade of the eighteenth century, the project of a new duty on sugar led to a reconsideration of the question.[4] A number of writers now contended that the sugar

[1] *The Groans of the Plantations: or, a true Account of their Grievous and Extreme Sufferings by the Heavy Impositions upon Sugar, and other Hardships,* etc. London, 1689, p. 9. This was reprinted in 1698.

[2] "'Tis not the Appointment of Law, but the Agreement of the Parties that must decide the question. In our Case the Buyer will naturally be at this lock: If you clear the Duty, I will give you so much for a Hundred of your White Sugar; if I must pay it you must have seven Shillings less. Which is as broad as long. . . . The Buyer, they say, must pay the Duty, but sure the Seller may pay it if he please. And he will please to pay it, rather then not sell his Sugar. If He will not, there are enow beside that will." — *Ibid.*, p. 9.

[3] *Ibid.*, p. 10.

[4] The depressed conditions of the sugar colonies was advanced as early as 1736 by Walpole as a reason for opposing the increased taxation of spirituous liquors. See *A Letter from a Member of Parliament to his Friend in the Country contain-*

duty would be borne by the seller. To the extent that the seller happened to be the planter, the theory would be equivalent to the one discussed in the last section — the theory, namely, that the landowner would bear the burden. For in this case the sugar planter would be at once the landowner and the trader. Thus one pamphlet, written to prove that the duty rests on the sugar-planter, argues that the important consideration is the possible restriction of the supply. "Every one admits," says the author, "that Quantity and Vent give a Price to any Commodity; it is therefore to be considered in what Cases the Quantity can be commanded or ascertained, in proportion to the Vent, and in what Cases it cannot; for where it can, the Duties will lie on the Consumer; but where it cannot, it will evidently lie on the Producer or Maker as often as the Quantity exceeds the Vent."[1] He then proceeds to show by specific figures that in the case of sugar the latter is true.[2] Another writer on the same subject lays down the general principle in similar language;[3] and John Ashley, who comes to a like conclusion, states that "Experience hath shewn, that all Duties laid upon Sugar affects the Producer more than the Consumer."[4] One of

ing his Reasons for being against the late act for preventing the Retail of Spirituous Liquors, etc., etc. London, n. d. [1736]. [By Sir Robert Walpole.] See esp. pp. 20, 21.

[1] *The Axe (once more) Laid to the Root of the Tree. Published for the universal Benefit of Mankind and dedicated to the Landholders of the British Dominions.* By a Friend of Truth and the Christian Religion. London, 1743, pp. 1–2 of *A Supplement on Taxes in General on British Sugar.*

[2] *Ibid.*, pp. 9 and 21 of the *Supplement.*

[3] "The Seller of a necessary Commodity can oblige the Buyer to pay it's Taxes, in case the Quantity at Market is only equal to the Vent or Demand. On the contrary, when the Quantity at Market much exceeds the Vent or Demand, this is absolutely out of the Seller's Power; for the Plenty will influence, and keep down the Price, in spite of his utmost Endeavours." — *Considerations against laying any New Duty upon Sugar, wherein is particularly shewn, That a New Imposition will be ruinous to the Sugar Colonies.* London, 1744, p. 7.

[4] *The Second Part of Memoirs and Considerations concerning the Trade and Revenues of the British Colonies in America.* By John Ashley, Esq. London, 1743, p. 79. Ashley had a decade earlier made an earnest plea for putting sugar

the last of the pamphleteers on this topic discusses the statement that the taxes will be shifted to the consumer, but urges in opposition that the price of sugar fluctuates according to the quantity imported into the marts of Europe, without reference to taxes imposed at any particular place.[1] Since it is far more difficult in the case of sugar than in that of other commodities to apportion the supply to the demand, he thinks the net result will be that the taxes will ultimately fall on the planter.[2]

Finally, another writer of the same year takes the ground that the absence of any foreign market combined with the glut in the British market necessarily causes the producer to bear the burden of the tax.[3]

into the list of non-enumerated commodities, and thus permitting its exportation to a wider market. His table of charges resting on the planter is detailed and interesting. See *The Sugar Trade, with the Incumbrances thereon laid open.* By a Barbadoes Planter [John Ashley]. London, 1734, esp. opposite pp. 4 and 7. *Cf.* also his *Some Observations on a direct Importation of Sugar from the British Islands.* London, 1735.

[1] "Thus it appears that the Price of Sugar fluctuates according to the Quantity imported into Europe, without any regard to any advanced Duties." — *The State of the Sugar Trade; shewing the Dangerous Consequences that must attend any additional Duty thereon.* London, 1747, p. 4.

[2] "Nor can the Quantity be proportioned or ascertain'd according to the Demand, as in the Case of many other Commodities, from the great Charge in settling a Sugar-Plantation, the long growth of the Sugar Cane, the uncertain Produce, and many other Reasons." — *The State of the Sugar Trade*, pp. 4, 6. *Cf.* p. 16. A similar argument may be found in *Reasons, grounded on Facts, shewing that a new Duty on Sugar must fall on the Planter, and that a new Duty will not certainly encrease the Revenue.* London, 1748. The same point is made in *Occasional Remarks upon the Act for laying a Duty upon the Retalers of Spirituous Liquors, etc., and for Licensing the Retalers thereof.* London, 1736, p. 6.

[3] "While there is a surplus Quantity at our own Market, and no foreign Market to go to where our Sugars can find a Vent at a living Price, the Planter will never be able to repay himself the Duty by raising the Price, which will always absolutely depend upon the Plenty or Scarcity at Market in Proportion to the Demand or Consumption." — *Considerations relating to the laying any additional Duty on Sugar from the British Plantations, wherein is shewn that such Duty will be injurious to the Commerce and Navigation of this Kingdom, ruinous to our Sugar Colonies, beneficial to those of France, and insufficient for the Purposes intended.* London, 1747, esp. pp. 9–13.

The same question of the incidence of the tax on sugar came up again at the time of the American Revolution. From among the many disputants on the subject we shall select only one particularly vigorous writer who claims that the pressure of the tax must rest in whole or in part on the planter. "There is no problem in Euclid," says our author, "clearer than that increasing the price of sugar by taxes must diminish the consumption of it; — that if the consumption decreases, the price must fall; — and that if the price falls below a certain point, the burthen of the tax which has caused that reduction must rest upon the planter."[1] Even if this did not happen, he thinks that the planter will nevertheless suffer in common with those who do not pay the tax as well as those who do. "If it were possible that the price could not fall, but was fixed by act of Parliament at a certain invariable rate per cwt., still the planter and those who might not consume it, as well as those who do, must bear a proportion, and a very considerable proportion, with the rest."[2]

Once that the reasoning as to the effect of an excise had been extended to this class of duties as imports, it was not long before it was applied to other taxes on commodities as well. Thus, at the time of the discussion of the duty on silk it was occasionally claimed that the benefits of a remission of the duty would accrue to the planter rather than to the consumer. But there were not lacking writers to show that this was very unlikely, and that the conditions of the market would force a reduction of the price.[3] The argument as to

[1] *The Case and Claim of the American Loyalists.* London, 1783, p. 98.

[2] "For the price of no one article of consumption," he adds, "that can be named, can be advanced much, and continue so, without occasioning a proportionable rise in every other consumable article. In the latter case, the planter bears only a share, but in the former the whole load of the tax besides the common share of its effects." — *Op. cit.*, p. 99.

[3] Thus one writer claimed that the foreign planters could not raise prices because "their necessity for the Sale of their annual Produce is at least as great; nay, I will venture to say, much greater, than our Necessity for buying the Silk, because Supplies from other Parts contribute very much to the Want of our Manufactury." — *Considerations relative to a Bill under the Consideration of a*

the non-shifting of the tax, however, continued to find its advocates, and was soon extended to other taxes as well, such as the tax on receipts and the shop tax. One writer, *e.g.*, declares that "nothing can be more demonstrative of the deficiency of national knowledge in the landed gentry of the present time than their almost universal supposition and belief that in whatever mode taxes be laid upon trade, or upon the conduct of trade, traders can always lay them upon the commodities taxed, and that ultimately they always fall upon the consumers."[1] It is indeed true, says our author, that prices may rise, but that will come only as the result of a scarcity produced by the ruin of the producers. "The destruction of trade and the ruin of numbers are necessary preliminaries to the accomplishment of this precious tax."[2]

Another writer who opposes the tax on receipts and who concedes that taxes on trade will fall on the consumer, asks: "But through what *intermediate progression* will that occur?" and answers: "When taxes are above their full height on trade, *by the most destructive imaginable.*"[3] He

Committee of the House of Commons for taking off the Duty on all Raw Silk of every Denomination, that shall be imported into Great Britain. Humbly offered to the Right Hon. Charles Townsend. London, n. d., p. 35.

[1] "For," says he, "the value of all commodities depends upon the markets. If they be full, they will be cheap; if they be empty, they will be dear. . . . So that, as to price, little or nothing depends on the will of the trader: he must be controuled by the markets." — *A Second Letter of Advice addressed to all Merchants, Manufacturers and Traders of every denomination in Great Britain concerning the odious and alarming Tax on Receipts, in which their Fears and Jealousies of future Alterations of the Act, with intent to force it upon them, by Ministry are considered,* etc., etc. By Oliver Quid, Tobacconist. 2d ed. London, 1783, p. 15. Quid's first *Letter of Advice,* published shortly before, ran through six editions in the year.

[2] *Op. cit.,* p. 16.— The first suggestion of a tax on receipts, so far as I am aware, is contained in *Some Thoughts on the Interest of England,* etc., etc. By a Lover of Commerce. London, 1697. The author couples this suggestion with a scheme to make the public take the Bank of England notes.

[3] *A Serious Address to the Public concerning the Tax on Receipts: with a few observations on the present critical and very alarming Situation of this Country with regard to Trade, Revenues, National Debt, and Principles of Government.* London, 1784, p. 25.

chooses as an illustration the import tax on sugar. The duty is paid in first instance by the merchant and charged to the planter. There can, however, be no increase of price without an alteration in the supply. The producer will, accordingly, restrict his output and raise the price to a paying basis,[1] "but ere that can be accomplished, the tax follows and oppresses him all the way." To the extent that he reduces his output, he diminishes the employment of "implements, shipping, seamen, refining at home, etc.," so that the kingdom is "deprived of so much trade and all its concomitant appendages." Furthermore, when the price is raised, the consumers themselves will decrease, "and so the quantity of trade will be still farther lessened." Finally, the new tax will increase smuggling.[2]

Taxes, therefore, fall upon the consumer only "by a partial destruction of the trade itself, and great intermediate mischief to the principal and ruin to the poorer manufacturers and dealers." "This reasoning," he concludes, "applied to all important things in trade, will be found, we trust, universally true."[3] Its truth, at all events, was accepted by an opponent of the shop tax, who contended that "it is unnecessary to argue, in supposititious cases, the impossibility of charging the shop-tax to the public." "For," said he, "Time has given a sanction, as it ever does, to Truth: There is not a Consumer to be found, who will openly come forward to avow he has paid the Shop-Tax in the Price of the Articles he has purchased."[4]

[1] "If the duties be so high as not to pay him at a full market, and a cheap price, he will necessarily make less and less, till he cause a thin market and raise the price to what will pay him."—*A Serious Address to the Public, concerning the Tax on Receipts, etc.*, p. 28.

[2] The equivalent of smuggling is, in the case of the tax on receipts, the use of forged stamps. *Op. cit.*, p. 22. This point was emphasized in *A capital Mistake of the Legislature respecting the Tax on Receipts.* London, 1784.

[3] *A Serious Address, etc.*, pp. 28–29.

[4] *A Letter to the Minority in the House of Commons, who voted on the 24th April, 1787, in Favour of a Motion for the Repeal of the Shop Tax.* London, 1787, p. 5.

Reviewing the authors treated in this chapter, we see that whatever the theories as to the incidence of the excise might be, each set of objectors emphasized his particular ground of opposition. Not infrequently an attempt was made to combine various and partly inconsistent theories in order to show the defects of the system.[1] The chief objection to the excise, however, was the inquisitorial character of the tax. By the beginning of the eighteenth century this had become ingrained into the people,[2] and the mere word *excise* was enough to inflame the popular mind.

The prejudice against this form of taxation spread from England to the American colonies, and the projects to establish an excise at various times met with vociferous opposition. Thus when the plan was seriously discussed in Massachusetts in the middle of the eighteenth century, Dr. Samuel Cooper spoke of it as "this detestable scheme" and "this destroying corroder," [3] and maintained that "none under this odious Œconomy will undertake such a Jobb [as Collectors

[1] So, *e.g.*, the pamphlet entitled: *The Mischief of the Five Shillings Tax upon Coal, is Here humbly Represented, That this Tax is Inconsistent with the Safety of England, Partial upon the Poor, Pernicious to our Shipping, and Seamen, Destructive of our River-Men, viz. Boat-Men, Keel-Men, Barge-Men, Ballast-Men, Coal-heavers, &c. Fatal to our Manufactures made with Sea-Coal; especially Salt, Glass, and all sorts of Gross Ironwork; (that by this Tax must be Run into the Coal Countries, or out of the Kingdom,) and highly Injurious to His Majesties Revenue.* London, 1699.

[2] *Cf.* as a type of the popular opinions on the subject the following passage: "It would be a History too long for any Man's Reading to set down all the barbarous Treatment the Queen's Subjects daily meet from the Gentlemen Excisemen; their Arbitrary Judgments, Clandestine, and most Villanous Methods of surprizing the Innocent and their partial and positive determining Things against Law, Reason and apparent Testimony of Fact." — *Remarks on the Horrible Oppressions, Insolencies and Unjustifiable Partialities of the Commissioners of the Excise, with some Historical Collections of Matter of Fact*, p. 59. London, 1706. The Excisemen are characterized as "a Sett of Men who have hitherto lived upon the Blood of Families, and rejoyc'd over the Calamities of those they have most unjustly and barbarously ruin'd." *Ibid.*, p. 50.

[3] *The Crisis.* [By Dr. Samuel Cooper.] n.p. [Boston], 1754, pp. 3, 4. "No man," he adds, "in the Exercise of common Sense can deny that the Extension of the E—e A—t will deprive us of a Part of our Liberty."

of Excise] but men of the most contemptible and abandoned Character."[1] A generation later a writer in New York referred to the excise system of a neighboring state as a "shameful species of slavery."[2]

The opposition reached its climax, however, a few years later in an impassioned outcry against the federal taxes on sugar and snuff, in a work which bears the motto: "The horror of all free states," and which contains the following graphic prediction: "Were some future congress to enforce, in all its horrors, a Portuguese, or a British system of Excise, were an hundred thousand mercenaries prepared to support it, the geographical situation of this continent would, in a few years, defeat the plan. The western shore of the Mississippi would afford a capacious asylum, and an impenetrable rampart to millions of fugitives from the Atlantic states. Excise would yelp in solitude; while new nations and empires of freedom would stretch along the banks of the Missouri."[3]

Summing up the above literature, it is clear that the discussion of the excise called forth almost every conceivable theory as to its incidence. Some thought that the tax was not shifted at all, some maintained that it was shifted to the landowner, some believed that it was shifted to the consumer, and some contended that it was again shifted by these

[1] *The Crisis*, p. 8. The same ideas are reflected in *The Monster of Monsters, a true and faithful Narrative of a most remarkable Phænomenon, which lately made its Appearance in this Metropolis to the Surprize and Terror of all his Majesty's Gooa Subjects. Dedicated to all the Virtuosi of New England.* Boston, 1754. Slightly more moderate is the tract entitled *Some Observations on the Bill intitled an Act for granting to his Majesty an Excise upon Wines and Spirits distilled, sold by Retail or consumed within this Province, and upon Limes, Lemons and Oranges.* Boston, 1754, pp. 6 *et seq.*

[2] "It is astonishing that a people so sagacious as those of Connecticut should inflict on a class of their citizens that shameful species of slavery, the Excise." — *Honesty shewed to be the true Policy: or a general Impost considered and defended.* By a Plain Politician. New York, 1786, p. 17.

[3] *A Short History of the Nature and Consequences of Excise Laws, including some Account of the Recent Interruption to the Manufactories of Snuff and Refined Sugar.* Philadelphia, 1795, p. 111.

to the employers of labor. These views were advanced with all degrees of confidence — but, with few exceptions, with little grasp of fundamental economic principles.[1] Among the assertions and proofs, however, we have found here and there some interesting premonitions of modern theories. Although we cannot speak of any unanimous or authoritative doctrine, the better opinion, as we have seen, and the one which gradually gained an ever-increasing number of adherents, was that the excise tends to be shifted to the consumer, and that it augments the burdens resting on the mass of the laborers. In this way scientific opinion, if it can be called such, gradually came to harmonize with the popular view.

[1] The hollowness of many of the objections to the excise scheme alluded to above is discussed in the following works not otherwise referred to in this volume: Nath. Polhill, *Reflections on the present Conduct of the Populace relating to the Government, particularly the Prime Minister; and the late Motion for a new Excise.* London, 1733; *An Examination of the late Conduct of the Ministry with respect to the Duties on Tobacco and Wine.* London, 1733; *Seasonable Reflections occasioned by the Bills expected in Parliament relating to the Duties on Wines and Tobacco.* London, n. d. (1733); *Remarks upon a Pamphlet entitled Considerations occasioned by the Craftsman upon Excises.* London, 1733; and *Cautions of the Maltsters, Hop-Planters, Brewers, Distillers, and others trading in Excis'd Goods or Merchandize, to their Brother Electors of Members to serve in the next Parliament of Great Britain.* London, 1734.

CHAPTER II

THOSE WHO FAVOR A SINGLE TAX ON LUXURIES

As we have already seen, confidence in the general excise, — in the sense of a tax on the producer or dealer, — which was deemed by the great mass of writers to be an indirect tax on the consumer, gradually weakened during the eighteenth century. Partly because it was no longer deemed equitable that the poorer consumers should bear the burden, partly because it was supposed that these taxes were prejudicial to trade, the idea of an indirect tax on consumption in general was now replaced by that of a direct tax on certain particular kinds of expenditure. Instead of levying a tax in first instance on the producer or dealer, it was now proposed to lay one directly on the consumer; and instead of making the general consumer bear the burden, it was planned to tax only the purchaser of certain luxuries. In short, in lieu of an indirect tax on necessaries, we now meet with the scheme of a direct tax on luxuries.

The earliest inkling of such a plan is probably to be found in a seventeenth-century work of Chamberlayne. This writer gives all the details of a scheme which he sums up in the proposition that "upon all such Commodities as occasion either Excess or Luxury, Wantonness, Idleness, Pride or Corruption of Manners there may be laid a large and extraordinary Impost."[1] But from his reference to "the practice of neighbour Nations" it is not quite certain whether Chamberlayne is here speaking of a direct or an indirect tax on luxuries. This doubt, however, does not exist in the case of another

[1] *Englands Wants or several Proposals probably Beneficial for England, humbly offered to the Consideration of all good Patriots in both houses of Parliament.* By a true Lover of his Country. [Edward Chamberlayne.] London, 1667, p. 4.

writer, toward the end of the century, who was careful to recommend taxes on commodities "payable by the Buyer" or "Consumptioner."[1] That he refers to luxuries appears clearly from his statement that, according to the scheme as elaborated in the monograph, "all Persons Tax themselves according to such Degrees as their Extravagancies shall prompt to exceed the Decent and Necessary Uses of them." The author discusses the objection that, as the purchaser is apt to be overreached anyway, the tax ought to be paid by the "seller who gets prophet."[2] His reply is threefold: first, if the goods are not sold, the dealer pays nothing; second, the seller is under no temptation to increase the price by more than the tax; third, there is less chance of evasion.[3] The tax, he concludes, rests where it is imposed, and cannot be shifted.

During the ensuing decades the same idea was taken up by other writers. Parker, for instance, suggests a general tax on commodities consumed, to take the place of all other taxes. As compared especially with the general property or land tax, Parker contends that whereas the land tax is grossly unequal and only spasmodically assessed, the new tax will compel individuals to pay in accordance with their abilities, and will fall on practically everybody.[4]

[1] *To the Honourable the Knights, Citizens, and Burgesses of the House of Commons in Parliament assembled, Proposals most humbly offered for Raising* (*in all Likelyhood*) *upwards of Five Millions of Money, without Charging the Poor, or Burthening the Rich, by such Ways and Means, that* (*for the greatest part thereof*) *the Payers will voluntarily Tax themselves.* [By J. M.] London, 1696, p. 1.

[2] "It may probably be objected, that 'twill be hard on the Buyer, who parts with his Money for anything herein named, to pay the Tax, when perhaps he may be out-reach'd in the price; therefore more reasonable to be paid by the seller who gets prophet." — *Ibid.*, pp. 4, 5.

[3] "The Answer hereunto is Obvious, if Consider'd, that first, none will be Burthen'd with Taxes for any Commoditie, that lies on hand dead and unsold: Secondly the seller is debarr'd of any Just pretensions for Inhancing the price thereof, beyond the usual Value . . . : and Lastly, the Tax will more certainly be pay'd, for no seller will put himself at the Mercy of any Informing Buyer, since it comes not out of his, but the Buyers Pocket." — *Ibid.*, p. 5.

[4] "1st Because the Land-tax was always uneqally paid, but this ['tax on merchandise'] cannot, for everyone will pay according to their Abilities and

Another writer deduces his scheme of a tax on luxuries from the doctrine that property rather than expenditure is the real test of justice in taxation. "The received Maxim of Equality," he tells us, "in levying any Tax, is to be understood to have relation only to the Wealth and Riches of the Subject; and therefore, when the poorer (always the labouring and industrious) Part of the People are loaded to the utmost, and that an Aid must necessarily be raised for the common Good, then, I say, the Rich alone should supply the Wants of the State."[1] He therefore suggests a whole series of taxes on luxury, like jewels, lace, fine fabrics, periwigs, swords, coaches, and beverages. One of the beneficial results of such a system, our author thinks, will be to lessen the demand for, and therefore the remuneration of, the laborers occupied in the production of these luxuries. For it is the high wages of the laborer that chiefly stand in the way of England's competing on favorable terms with her neighbors.[2]

Occasions serve. 2nd To the Land-tax there is but a few in comparison to the whole Nation that pay, and a great many that are better able than many that pay to the Land-tax pays nothing, but in this few or none will escape, but will be sure to pay something yearly, although but a small matter." — *Proposals for a very Easie Tax to raise between Two and Three Millions of Money per Annum, (if not a greater Sum) in the room of the Land-Tax, to begin to pay the Publick Debts, and to discharge this Nation not only from all those Taxes that these Two late expensive Wars have loaded Us with, but from all other Taxes that are paid to Her Majesty, in a few years' time, with other happy Consequences, that will accrue to the Kingdom in general, if it should be laid on and continu'd. Also Proposals for the further Encouraging the Woollen-Manufactures of this Kingdom in foreign Parts.* [By Ephraim Parker.] London, 1713, p. 6.

1 "But this," he adds, "is to be done with the greatest Gentleness imaginable, and if possible, as it would be a means to engage them to comply with the greater Alacrity, some Compensation should be made, either at the present, or in Time to come, to the Contributors to such an Aid." — *An Essay on Ways and Means for the Advancement of Trade and for paying off in a few Years, the Debts of the Nation, without Laying any additional Burden on Land.* London, 1726, p. 8.

2 "Next to the Acquittal of the National Debts, there is nothing can promote Trade so much, as lowering the Price of Labour amongst us. By the Exorbitancy of our Workmen, we have it not in our Power to sell our Manufactures at foreign Markets at so low a Rate, as we were wont, and for this Reason alone, we have lost many valuable Branches of Trade which our Neighbours, who work cheaper, have taken up." — *Ibid.*, p. 44.

In order to accomplish this object he is even in favor of a law restricting the further erection of buildings in London whereby "the temptation to Luxury will, as far as possible, be taken away from the industrious Part of the Subject.[1]

This attribution of the decay of trade to high wages which has been referred to above[2] in another connection, was a common subject of discussion with the writers of the time. But it was vigorously opposed a little later by another partisan of the taxation of luxuries.[3] As the title clearly indicates it is not in the high wages of the laborer, but in the extravagant profits of the tradesman, and especially in the luxurious habits of the rich, which lead to an undue consumption of "Articles of Foreign Luxury," that the reason of the decay of trade is to be sought.[4] The author advances the general principle "that all Taxes should be laid as near as possible in the last Instance, and upon the immediate Consumer, and in proportion only to what he consumes, there being nothing more unjust or absurd, than that a Man should pay a Tax for what he does not consume."[5] He bases his conclusion in favor of taxing the consumer, rather than the producer or importer, largely on the argument that taxes accumulate with each transfer, and "consequently draw with them, through their whole Progress, a Profit on the Tax, as well as upon their first value or prime cost."[6] Accordingly he proposes

[1] *An Essay on Ways and Means*, p. 46. [2] *Supra*, pp. 41–46.

[3] *Proposals for carrying on the War with Vigour, raising the Supplies within the Year and forming a National Militia. To which are added Considerations in Respect to Manufacturers and Labourers, and the Taxes paid by them; the Inconveniences of Credit for small Sums, and the Courts lately erected to recover them. Intended to demonstrate, that it is not the Dearness of the Labour of the Poor, but the Profits and Expences of higher Classes of People, which are the real Clog on the Foreign Trade and Commerce of England.* London, 1757.

[4] *Op. cit.*, pp. 52–54. [5] *Op. cit.*, p. 11.

[6] "The value of the Goods, and the Tax upon them, are so effectually blended, that they pass together under the general Name of the *Price*, upon which a proportionable Profit is expected by every one of the various dealers, through whose Hands they pass; and then by a repeated Accumulation of Profits, before they can be purchased by the Consumer, the Taxes gradually swell to such an Amount 'that in England the Exchequer receives only about one-half of what is taken from the taxpayer.'" — *Op. cit.*, p. 10.

a series of taxes on a "vast variety of articles that may be placed in the List of unnecessary Expenses and are only the Trappings and Gildings of modern Vanity and fashionable Excess." For "the stately Cup of Luxury, Riot and Extravagance are full to the very Brim." [1]

Another writer, by the name of Downes, who was equally insistent on laying taxes on the "Superfluities of the Rich, the Proud and the Extravagant," [2] advances an ingenious argument designed to show that such taxes will not interfere with trade. A tax on such commodities, he thinks, far from diminishing their consumption, will really increase it, for the more costly such articles, the more will their possession and display be sought after by those who belong to, as well as those who seek to enter, the charmed circle.[3] "Should the Duty on the 'foregoing Things take place," says Downes, "I cannot be persuaded, that they would be less wore than

[1] *Op. cit.*, pp. 31–32. Among these imposts is included a tax on cards, for "Card-playing is a Folly which pervades all Ranks, Sexes and Ages, creates such a Waste of Time, leads to such unthought-of, as well as unheeded expences, occasions such violent Alterations in our Tempers, interferes so much with every Kind of Business, and brings with it such an inexpressible Train of ill Consequences" as to defy description. This is indeed a tax, he thinks, which "every Person of a sober Understanding, which implies his not being infatuated with this fashionable and yet foolish Diversion . . ., will heartily give his consent to." —*Ibid.*, pp. 28–29. It is an interesting fact that in this writer we first find a recognition of the modern theory of economics that capital is nothing but a capitalization of income. Referring to the fact that a reduction of interest on government bonds will inevitably produce a diminution in their selling price he says: "For it is a Fact which cannot be questioned, that Multitudes of People look no further than the Income, and annex, in their own Idea, a Value to that, without any Respect had to the Capital . . . nor are the causes of their running away with this notion at all difficult to discover." — *Op. cit.*, p. 17.

[2] *A Scheme plainly demonstrating how several Hundred Thousand Pounds may be rais'd Yearly to the Government without officers to collect it, without oppression to the Poor, without hurting Trade and without any Person's being oblig'd to pay it, but when he pleases so to do, etc.* [By Thomas Downes of St. Albans.] London, 1732, p. 13.

[3] "If it should be objected, That a Tax on Superfluities would cramp the Tradesman and Artificer; I think I may venture to affirm the contrary; for Pride is of such a Nature, that it will be gratified, tho' at great Expense. . . . Nay, I am almost of opinion, that a Tax on Things like these would promote the Consumption of them in this Expensive Age." — *Op. cit.*, p. 14.

they are; since, if I know any thing of our modern Gentry, *etc.*, they would be more afraid to be seen without them, than they would be concern'd about the Tax." Downes also favors the tax on the consumer rather than on the producer or dealer, for the same reason as the previous writer, namely, that it prevents the cumulative rise of price, which, however, he considers illegitimate.[1] It is also to be noted that Downes suggested the scheme of assessing the tax by affixing "stamps or tokens"[2] to the commodities — a scheme which was not tried until the government of the United States, more than a century and a quarter later, adopted it with great success, at the suggestion of Mr. David A. Wells, in its internal revenue system.

During the seventeenth and the early part of the eighteenth century these isolated proposals met with little support. It was not until shortly before the middle of the eighteenth century that the doctrine was put forward in so authoritative a manner as to command attention.

The plan of a single tax on luxuries was unfolded in an anonymous work,[3] the authorship of which is doubtful even to this day. By some it is ascribed to Richardson, by others to Decker, with the probabilities in favor of the former.[4]

[1] *A Scheme plainly demonstrating, etc.*, p. 22.

[2] *Op. cit.*, pp. 15–18. During the excise controversy one writer defended Walpole's project on the ground that it was really a tax on luxuries, whereas the land tax was a general excise. *An Humble Address to the People of England. Being a Demonstration that a Land Tax is more prejudicial to Trade and Liberty than an Inland duty on Wine and Tobacco.* London, 1733, especially pp. 9 and 17.

[3] *An Essay on the Causes of the Decline of the Foreign Trade, consequently of the Value of Lands of Britain and on the Means to Restore Both.* Begun in the Year 1739. London, 1744.

[4] For the grounds on which the authorship is ascribed to Decker rather than to Richardson, see the article in Palgrave's *Dictionary of Political Economy*, i, p. 519. To the authorities quoted there may be added the statements in Tucker, *A Brief Essay on Trade*, 1750, pp. 129–149; in Nickolls, *Remarks on the Advantages and Disadvantages*, etc. (quoted a few notes below), pp. 264 and 268; and in Arthur Young, *Political Arithmetic*, p. 244, in all of which it is also ascribed to Decker. Professor Gonner, the author of the article in the *Dictionary*, states that the edition of 1749 bears Decker's name on the title-page. It is to be

The author was careful to emphasize his opposition to general excise duties "because of the great prejudice they do to trade." His plan was to lay "One Tax on the Consumers of Luxuries and take off all our other Taxes, Excises, and Customs."[1] He gave a catalogue of the few articles he wished to have taxed.[2] It goes without saying that, in his opinion, the tax would remain where it was put. "The greatest benefit of All," he added, "is that this Proposal hath not those extending, pernicious, Trade-destroying Consequences of our present Taxes; for it will not raise the Value of any one Commodity, but rather, by checking Luxury, the Bane of Virtue and Industry, we shall become a rich and flourishing People."[3]

An enthusiastic advocate of this scheme for a single tax is to be found in Josiah Tucker, who outlined the plan in an appendix to one of his important works.[4] Tucker's chief

remarked, however, that the later (Edinburgh) edition of 1756 (a copy of which, together with one of the original edition, is in the possession of the present writer) is anonymous. The strongest argument against its ascription to Decker is that Decker is known to be the author of another tract of almost the same date advocating a single tax on houses (see below, chap. iii), and that, in many works of the fifties and sixties, when Decker's scheme is mentioned at all, the reference is to the house tax. It seems improbable that two such different projects should have been advanced by the same writer, without making in the later work any reference at all to the plan of the former. Professor Cunningham is also of the opinion that Decker cannot be the author. See *The Growth of English Industry and Commerce in Modern Times*, 1892, p. 409, note 3. At the same time, it is to be noted that Arthur Young in his *Political Arithmetic* ascribes both works to Decker, and speaks (p. 214) of the tax on houses as Decker's "favorite scheme." Yet it was the earlier one, or at all events the one first published. In a note in the *Economic Journal*, vol. xviii (1908), p. 629, Professor Gonner withdraws the ascription of the work to Decker, without, however, attempting to decide whether it was written by Richardson.

[1] *An Essay, etc.*, p. 44.

[2] Adam Smith, who refers to his "well-known proposal" to tax "all commodities" (*Wealth of Nations*, book v., chap. ii; Rogers' ed., ii, p. 474), as well as Bastable (*Public Finance*, 2d ed., 1895, p. 318), who speaks of his "plan of a license for the consumption of commodities," are not quite exact. For the plan was not to tax "commodities" or "all commodities," but only certain "articles of luxury." One of the chief recommendations of the scheme to the author is that it will act as a "Sumptuary-Law to keep all People in their proper Stations." —*Ibid.*, p. 51.

[3] *Ibid.*, p. 52.

[4] *A Brief Essay on the Advantages and Disadvantages which respectively attend France and Great Britain with Regard to Trade.* The appendix is entitled *An*

reason for the proposal is contained in his general principle that "it is just and reasonable each Person should pay in proportion to what he Uses of any Commodity: Now the most probable Grounds we can go upon (for the affair will not admit of Certainty and Demonstration) is, That Persons in general live in Proportion to the Figure they make."[1] Hence to tax a man according to his expenditures for luxuries constitutes the most equitable method of taxation. Another advocate of the scheme was Dangeul,[2] whose reasons for opposition to the general excise have already been mentioned.[3] After giving an interesting statement of his general philosophy of taxation,[4] he concludes that "a free tax bearing solely upon the different articles of luxury, and consumption (those of absolute necessity excepted) seems the properest to fulfill these intentions." He approves the scheme as developed by its original author,[5] and favors it especially because the amount spent on each class of luxuries may be regarded as a rough index of the income enjoyed and disposable for such a purpose.[6] It is interesting to observe that this argument found its way to America, where it

Appendix containing a Plan for raising one only Tax on the Consumers of Luxuries. [By Josiah Tucker.] London, 2d ed., 1750. See esp. pp. 123–135 and 145–166. [1] *Ibid.*, p. 153.

[2] *Remarks on the Advantages and Disadvantages of France and Great Britain, etc.* [By Sir John Nickolls, really Dangeul.] London, 1754.

[3] *Supra*, p. 44, where the exact title is given.

[4] "The consideration of the different taxes which constitute the Revenue of the State, and of the inconveniences of each, naturally leads a Patriot to the desire of finding the means of taxing all the articles which could, and ought to be made contribute, in the justest, easiest, equalest manner, to the Public charge; that is to say, of taxing every subject in proportion to the advantage he draws from Society: insomuch, that with respect to him who has no property, so far from depriving him of the hopes of acquiring any, the influence of the taxes should be no more than a gentle spur to his industry, and that it should fall reasonably, and not arbitrarily upon those who have some property, that is to say, in proportion to the real and personal estates they enjoy." — *Ibid.*, pp. 268, 269.

[5] Dangeul ascribes it to Decker.

[6] "He takes each of these articles for the sign of a fortune of such a certain revenue, upon which he is imposing a tax of three pence for every pound sterling." — *Ibid.*, p. 269.

was later utilized by Pelatiah Webster in his struggle to persuade Congress to adopt the import duty on commodities. "A tax on general consumptions," Webster tells us, "cannot fail to bring the burden in due proportion on individuals, because every one will pay in proportion to his consumption, and the presumption is that the man who spends most is best able to spend." [1]

The scheme of a tax on luxuries met in the main with little opposition in Great Britain. An exception, however, is to be noted in the case of a contemporary writer who clearly voiced his preference for an excise, or tax on the producer or dealer, as compared to a direct tax on the consumer. His conclusion is based on the argument that the consumer of an excised article is really not aware of the tax, for "when a tax is blended with the Price of the Commodity, the tax is forgot, or its Remembrance makes little Impression," whereas if a tax is assessed directly on the consumer, it "will be very disgustful." [2] "He who neglects the Study of Mankind," adds our author, "who refuses to give Attention to their Passions as well as to their Reasonings, is not fit for the Government of Mankind."[3] The author is notable not only for advancing what later on became a common argument in defense of indirect taxation in general, but also for his introduction of the distinction between fiscal and social taxes,[4] which has played a great and increasing rôle in recent discussion.

[1] *A Sixth Essay on Free Trade and Finance particularly showing that Supplies of Public Revenue may be drawn from Merchandise, without injuring our Trade or burthening our People.* [By a Citizen of Philadelphia, 1783.] Reprinted in *Political Essays on the Nature and Operation of Money, Public Finances and other subjects, published during the American War and continued up to the present Year, 1791.* [By Pelatiah Webster.] Philadelphia, 1791, p. 236.

[2] "There is a great difference between a Tax, which, when once paid, the Party hears no more of, and a Tax which operates as an annual Diminution of the Income." — *A Letter from a Member of Parliament on the Plate Tax.* London, 1756, p. 27.

[3] *Op. cit.*, p. 29.

[4] The distinction is expressed by the author as one between a tax of revenue and a tax of police. "All Taxes ought to be laid for one or both of these Purposes. Either it is a Tax of Revenue, the view of which is to supply the Neces-

As has been noted, however, the great majority of authors preferred the direct tax on luxuries. Among the writers who favored this plan, which was soon adopted, — not, indeed, as a single tax, but as a supplement to existing taxes, — may be mentioned Forster,[1] the determined opponent of all taxes on wages, and to a limited extent Postlethwayt.[2] With the incorporation of certain taxes on luxuries into the general scheme of the English revenue system, the discussion of the proposition soon ceased.

sities of the Publick, or it is a Tax of Police, intended to operate as a Restraint; for Instance, on the Importation or Consumption of foreign Manufactures, to the Prejudice of our own, or on some Article of Luxury prejudicial to the Publick." — *A Letter from a Member of Parliament on the Plate Tax.* London, 1756, p. 13.

[1] *An Enquiry into the Causes of the Present High Prices of Provisions.* [By Nathaniel Forster.] London, 1767. Part I, chap. iii, "Of Taxes," pp. 50–53.

[2] For the modified advocacy of Postlethwayt, see the reference *infra*, p. 91.

A rather unusual forecast of some effects of taxation was made in 1785. "The Commutation Bill and Shop Tax bearing so very heavy on the Housekeeper will most certainly reduce the major part to Poverty and Ruin; and will impede Matrimony, and, together with the Tax on Maid Servants, be productive of an Increase of Prostitution, too horrid even to imagine." — *Letters on Excessive Taxation. From a Philanthropist.* London, 1785, p. 85.

CHAPTER III

Those who favor a Single Tax on Houses

The revenue reformers of the eighteenth century were fond of schemes for a single tax. Once granted that taxes on consumption rest on the consumer, and that it is wise to avoid the incidental interference with trade which would result from taxes levied on the trader, it was but a step further to contend that a single tax on luxuries, which at all events necessitates a scrutiny into the luxurious expenditures, might be improved upon. By taking some one criterion of expenditure, which was not only universal but patent to all, the same results might be reached with much less difficulty. The desired criterion, it was now suggested, was the building occupied. Instead of a general excise, it was proposed to lay a single tax on houses.

The chief advocate of this scheme was Sir Matthew Decker.[1] He starts out with the idea of a tax or license duty on the consumers of tea, to replace the tax on the importers or dealers. But, passing by this as a matter of minor importance, he proceeds to make the suggestion for a "general excise." This, he is careful to explain, differs entirely from what is generally associated with that name. His scheme, so he tells us, means only "one single Excise-Duty, and that upon Houses."[2] He discusses its characteristics at great length, and states its chief merits as follows:

[1] *Serious Considerations on the several High Duties which the Nation in general (as well as its Trade in particular) labours under: with a Proposal for preventing the Running of Goods, discharging the Trader from any Search, and raising all the Publick Supplies by One Single Tax.* By a Well-Wisher to the Good People of Great Britain. [Sir Matthew Decker.] London, 1743.

[2] *Ibid.*, p. 15.

"All Duties being abolished, it would prevent all Manner of Running and hinder the Ruin of many Thousands of poor unhappy Creatures, which have been, or are still employed in the Smuggling Trade"; furthermore, "it would set the Merchant and Shopkeeper free from a Multitude of false and vexatious, or frivolous Informations, which may now be lodged against them"; and, above all, it would enable "the Merchant as well as Shop and Warehouse-Keeper to trade with Half the Stock, and make his Profit the same, or rather increase it."[1]

Everywhere we find the emphasis put on the interests of production and trade, because of the opinion that, in the long run, these interests are the important ones to be considered. This appears clearly from his views as to taxes on the workingmen. Although Decker, indeed, desires to exempt the houses "of the lowest and poorest Sort of People," he puts his demand on the express ground that "thereby their Labour might become so much the cheaper."[2] The incidence of taxes on necessaries, therefore, according to Decker, is really on the employer, and not on the laborer. His general idea of favoring production and trade may be seen also from the close of his exposition, where he expresses the hope that it may be said of England, as formerly of Tyre, "that their Merchants are Princes and their Traffickers the Honourable of the Earth."[3]

Decker's project was greeted by a number of enthusiastic followers. Most of these preferred the single tax on houses to the general excise on the ground that the former would bear less heavily on the producer and the trader, since lower taxes on necessaries would mean lower rates of wages. Thus, the author of an anonymous tract, in speaking of a new plan to be "substituted in the room of our present preposterous

[1] *Ibid.*, p. 23.

[2] "And the Goods," he adds, "which are the Produce of their Labour, might, by this Means, be sold at as low, or even a lower Rate than can be afforded by other Nations." — *Ibid.*, p. 16.

[3] *Ibid.*, p. 32.

Method of Taxing," said that "a more advantageous Scheme, not altogether unlike that of Sir Matthew Decker's might be proposed, which would exempt the Laborious from every Tax; by which the landed Interest and all the useful Members of the Community would be considerable Gainers." [1] So also Postlethwayt held that an artificial rise of wages through taxes was injurious to the laborer as well as to the whole community, and put the query "Whether the Encrease of Taxes in our State do not all somehow ultimately terminate upon our Trade and Commerce." [2] To avoid this result he favored "One moderate and equal Tax upon Houses," or, as he puts it in another place, "some one general tax, either upon houses or otherwise." [3] Postlethwayt, it will be seen, was not quite sure in his mind as to the advisability of a single tax on houses; later he even suggested as an alternative the single tax on luxuries.[4] Another writer, Fauquier, with whose vigorous opposition to the excise we have already become acquainted, also approved Decker's scheme. His argument was simple. "Since the Consumer pays the whole of the Tax, it must be equal to him, when he maturely weighs it, how or on what it is laid. All that really concerns him, is that he should pay as little as the Exigencies of the State will admit of; and that the whole of what he does pay should, if possible, go clear of all Deductions into the Exchequer, to answer the Purposes for which it was levied." [5]

[1] *The Case of the Five Millions fairly stated in regard to Taxes, Trade, Law, Lawyers, etc. Addressed to the Guardians of our Liberty.* London, 1758, p. 17.

[2] *Great Britains True System wherein is clearly shewn, That an Increase of the Public Debt and Taxes must, in a few Years, prove the Ruin of the Monied, the Trading and the Landed Interests etc. Humbly submitted to the Consideration of all the Great Men, In and Out of Power.* By Malachy Postlethwayt, Esq. London, 1757, p. 132.

[3] *Ibid.*, pp. 130, 134.

[4] "A free tax, bearing solely upon the different articles of Luxury and Consumption (those of absolute Necessity excepted)." — *Ibid.*, p. 319. See above, p. 88.

[5] *An Essay on Ways and Means*, etc. By F. F. London, 1756, p. 22. For the full title of the work, see above, p. 29, note 1. Fauquier really approved of

A few writers accepted the principle of this scheme, while desiring to modify it by substituting windows for houses. The principal advocate of this single tax on windows, Horsley, advanced his project immediately after Decker had published his plan.[1] Horsely, it appears, cared more for the "singleness" of the tax than for anything else. "It seems to me no otherwise material," he tells us, "what you lay the Duty on, so it be a single Duty."[2] Horsely, however, was not the originator of this scheme of a window tax, which seems to have been advanced for the first time a decade earlier by a writer on the score of an alleged equality which would not appeal to the modern mind. "The poorer Sort of People," he tells us, "live in small Houses and they seldom have more Windows than are absolutely Convenient; as on the other Hand, the Nobility and Gentry live in large and spacious Buildings, and consequently have a great Number of Windows and perhaps many more for Ornament than for Use."[3] The same idea of "consolidating every imposition whatever," in order to "fix it altogether on windows," was advanced by another writer[4] a few decades later, when all single

Decker's scheme, only with some modifications. See *An Essay*, p. 26. He even suggested a capitation tax as an alternative. — *Ibid.*, p. 32; and more decidedly in the postscript to the second edition, published the same year.

[1] *Serious Considerations on the High Duties examin'd: address'd to Sir Matthew Decker*. By Mr. Horsely. London, 1744.

[2] *Ibid.*, p. 32.

[3] *The Occasional Monitor: containing a Scheme or Proposal for taking off the several Taxes on Land, Soap, Starch, Candles, Leather, Plate, etc. and replacing the said Duties by another Tax, which will bring in more Money in a more Easy and Equal Manner and less burthensome to the Subject.* Part II. London, 1732, p. 6. It is worthy of note that the author is one of the earliest advocates of the excess-of-tax-over-price doctrine discussed below (book ii, chap. v). "It is remarkable," he tells us, "that whenever there is a Tax laid upon any Commodity, the Price of that Commodity is thereupon advanced to double the Amount of the Tax. The Reason why it is so, and must be so, is very obvious and easy to be accounted for." *Op. cit.*, p. 3. He does not condescend to advance the reasons for this simple phenomenon.

[4] *Considerations on the National Debt and nett Produce of the Revenue: with a Plan for consolidating into one Rate the Land and all other Taxes, by which More Money will be raised; Individuals not pay half the present Taxes; Smuggling*

tax ideas had about gone out of fashion. The scheme of a window tax, however, was vehemently opposed by de Lolme, who suggested, on the contrary, as a substitute a "tax assessed from the internal capaciousness, or Tonnage, of houses," with a reduction for each aperture, for then "people will no longer think they are under a necessity of being Frugalists or Oeconomists in the introduction of Light into their houses: they will indulge themselves freely and liberally in the use and consumption of that fluid." [1]

Decker's project for a single tax on houses soon met with determined opponents. Of these, the most prominent was Massie. In his earlier work, written to controvert the plan as set forth by Fauquier,[2] Massie disclosed only a moderate opposition.[3] But in the following year he turned his batteries in full force against Decker himself.[4] He specifies all kinds of objections upon which it is not necessary here to dilate, farther than to state that he condemns the single tax on houses as really "a Proposal to raise all the Public Supplies by one General Tax upon the Commodities and Manufactures of Great Britain." So far as the incidence of the tax is concerned, he believes that it will be shifted to the consumer; for, "whatever Money a Farmer, a Tradesman, or a Merchant pays for Taxes is, and must be repaid him in the Prices of the Commodities he deals in." [5] He favors the

altogether prevented; . . . the poor exempted from every Contribution, etc. By a Merchant of London. London, 1784. See esp. p. 31.

[1] *Observations relative to the Taxes upon Windows or Lights.* By J. L. de Lolme. London, 1788, p. 55.

[2] *Observations upon Mr. Fauquier's Essay on Ways and Means for raising Money to support the present War without increasing the Public Debts*, etc. By J. M. [Joseph Massie]. London, 1756.

[3] He objects more to the amount to be raised, than to the manner of raising it.

[4] *The Proposal, commonly called Sir Matthew Decker's Scheme for one General Tax upon Houses, laid open; and shewed to be a deep concerted Project to traduce the Wisdom of the Legislature; disquiet the Minds of the People; and ruin the Trade and Manufacturies of Great Britain.* [By Joseph Massie.] London, 1757.

[5] *Ibid.*, p. 114. He adds in another passage: "They are, in reality, Factors between the Landholders and Consumers of Commodities; and every Man

existing land tax because it finally falls on the landowner.[1] In respect to the incidence of the other taxes, he seems to revert to the old theory that "the Taxes of this Kingdom are so wisely laid, as to encourage Industry and good Husbandry, by discouraging their Opposites."[2] Somewhat later Arthur Young also opposed Decker's scheme and the theory of incidence on which it was based. Taxes on houses, he thinks, force a man to pay not because he *consumes*, but because he *possesses;* the one [the excise or the tax on consumption] is a proof he is able to pay, the other [the tax on houses] no proof of it at all.[3] This is the last reference to the scheme,

knows, that a Factor must be paid Commission for the Goods he sells, over and above all Taxes and other Charges." — *The Proposal*, p. 116.

[1] "The Land-Owners cannot sell or lett their Lands for more Money, because they pay this Tax out of their Rents ; for a Buyer of Land considers what Money it will bring for his own use ; and a Farmer of Land must consider what Prices his Corn, Cattle, Wool, Butter, Cheese, etc., will fetch at Market. . . . And as the Prices of these Commodities are, and necessarily must be governed by the Money that People in general can afford to pay for them (Years of Scarcity excepted), the Land-Tax must fall upon the Land-Owners." — *Ibid.*, p. 38. *Cf.* also p. 104.

[2] *Ibid.*, p. 68. That Massie set his face sternly against any further increase of taxation is shown by two interesting pamphlets, in which he has not a little to say about the question of incidence. See *Reasons humbly offered against laying any further British Duties on Wrought Silks of the Manufacture of Italy, the Kingdom of Naples and Sicily, or Holland: showing the probable Ill Consequences of such a Measure in regard to the Landed Interest, Woollen Manufacturies, Silk Manufacturies, Fisheries, Wealth and Naval Power of Great Britain.* London, 1758. This contains a bibliography of Massie's writings up to that date. *Cf.* also his *Observations on the new Cyder-Tax, so far as the same may affect our Woollen Manufacturies, Newfoundland Fisheries,* etc. London, 1764. For Massie's attitude on the question of the shifting of taxes to the poor, see above, p. 61. In his two other important tracts on taxation, Massie rather neglects the subject of incidence. See his *Calculations of Taxes for a Family of Each Rank, Degree, or Class for one Year.* 1756. A reply to this was made by Bourchier Cleeve, and a rejoinder by Massie in *A Letter to Bourchier Cleeve, Esq., concerning his Calculations of Taxes.* 1757. Massie's suggestion, of a tax on bachelors and widowers, is based on the theory that it will not affect prices or labor. See his *Ways and Means for Raising the Extraordinary Supplies to carry on the War for Seven Years, if it should continue so long, without doing any Prejudice to the Manufacturies or Trade of Great Britain* (by J. Massie). London, 1757.

[3] *Political Arithmetic.* By Arthur Young. London, 1774, chap. iii, sec. i, esp. p. 214. During the revolutionary era in France a similar scheme for a single tax

for, with the introduction, shortly after, of the tax on inhabited houses by Lord North, the agitation for a single tax of this kind came to an end.[1]

on houses was again advanced as an entirely novel idea. See *Plan de Révolution concernant les Finances, ou Découverte Consolante de l'Impôt Unique du Toisé.* Par M. Blanc-Gilli, de Marseille. Paris, 1790. See esp. the *Supplément à la Découverte de l'Impôt du Toisé*, pp. 78 *et seq.*

[1] The modern idea of a single tax, as is well known, contemplates, on the contrary, the exemption of houses from the real estate tax. It is interesting to note that as early as the seventeenth century we find a writer who suggests at all events a lower rate of taxation for houses than for lands. "I have all this while been driving at Equality. But there is an Equality so unequal that I cannot but declare my sense against it, and that is: that Houses should beare equall proportion with Lands, for which there is no reason, as every man's reason will tell him." — *A Proposal for an Equal Land Tax, humbly submitted for Consideration.* London, 1691, p. 10.

CHAPTER IV

THOSE WHO FAVOR A GENERAL PROPERTY TAX

By the close of the seventeenth century the old general property tax in England had become in fact what it soon became in name — a land tax.[1] There was not lacking then, as now, a group of writers who believed that the panacea for existing evils was to be found in the reimposition of a tax on the various kinds of personal property, and especially of intangible personalty. This belief most commonly took form in demands for a tax on moneys at interest, supplemented a little later by calls for a tax on the evidences of debt or on funds in general. All these demands were based on the theory that a tax on loans would fall on the lender.

The earliest formulation of such a demand is found in a work of the younger Culpeper.[2] Taxes on land, says he, fall on the landowner, while taxes on trade and luxury rest there and leave the usurer free.[3] Taxes on moneys at interest, however, would not only diminish the curse of usury, but since they fall on the lender, they would raise the value of land, which now bears far more than its proportion of taxes.[4]

[1] See Seligman, *Essays in Taxation*, 5th ed., 1905, pp. 45–48.

[2] *The Necessity of Abating Usury re-asserted; in a Reply to the Discourse of Mr. Thomas Manley entituled, Usury at Six per Cent. examined, etc., together with a Familiar and inoffensive way propounded for the future Discovery of summes at Interest, that they may be charged with their equal shares of Publick Taxes and Burthens*, etc. By Sir Thomas Culpeper, Jun., Knight. London, 1670. For Manley's treatise, and his views on the question, see above, p. 47. For an earlier work of Culpeper, and his views, see above, p. 25.

[3] *Ibid.*, pp. 5–7.

[4] "I cannot but with trouble reflect, that Land and Trade should so conspire to play the Usurers game against themselves, as by their discord all along they have

Another writer, who entered more thoroughly into the difficulties connected with the problem of incidence, was not blind to the fact that in the ordinary course of events, a tax on interest tends to be shifted to the borrower. He believed, however, that this might be prevented by an act of Parliament, and that the tax might be enforced through a compulsory registration of all debts and mortgages.[1] In the same way, Davenant, who thought that "there is nothing too hard for the wisdom of a parliament to bring about," proposed a tax on "the usurers, who are the true drones of a commonwealth, living upon the honey without any labour."[2] This was, however, only a passing fancy of Davenant, whose fundamental theory of incidence was somewhat different.[3]

Other writers wished to include not only moneys at interest, but all kinds of personalty, to form a general property tax. Thus, one author, who objected to the "sole Land-Taxes,"[4] demanded that "Sums at Interest with all other Liquid Revenues shall pay the Quota in a due proportion with our Land-Rents." This "due proportion," as he soon attempts

done; The trader crying, taxe Land, in Gods name, for that will bear it, trade cannot; And the Land-lord of late, spare Land, for Gods sake, it hath already been taxed to death; Taxe now our superfluous trade, and therein our luxury; Giving, it seems, the Usurer over to his Reprobate sense, and therefore freely permitting him to thrive in this World; But little, in the mean time, considering, that tillage and traffick lay in one belly the Earth, sayle in one bottom upon the Sea, and fear one Pyrate or vermine, the Usurer." — *Ibid.*, p. 15.

1 *A Plain and Easie Way for the Speedy Raising of Money to supply their Majesties Present Occasions: which will also, very much tend to the Advancing the Value of Lands.* By a Divine of the Church of England. London, 1691. *Cf.* esp. pp. 12, 30, 31.

2 These, he thinks, "should, of all people, be brought in to bear their proportion of the common burden." "As yet," he adds, "they could never be effectually reached but they may be fetched in by the wisdom of a parliament, if the house of commons would please resolutely to set themselves about it." — *An Essay upon Ways and Means of supplying the War.* [By Charles Davenant.] London, 1695. Reprinted in *Collected Works* of Davenant, edited by Whitworth. London, 1771. *Cf.* p. 111 of the original or vol. i, p. 57 of the reprint.

3 See below, p. 103.

4 *A Letter from a Gentleman to his Friend, by way of Answer to one from Him, shewing the Present Expedient and Easiness of Equal Taxing.* [By R. S.] London, n.d. [about 1692], p. 10.

to prove, is a considerably higher rate than that levied on land.[1] Two other writers of about the same date, whose views on the excise have already been mentioned,[2] were also heartily in favor of this scheme. The one thought that a tax on personalty joined to the tax on lands would form "a mixed and comprehensive Quota, or Tax upon all Abilities";[3] the other simply desired the reimposition of the "Subsidy or Pound Rate as the Ancient Methods of our Ancestors."[4] De Foe also, at the end of the century, objected not only to the taxes on the poor,[5] but to the inequality of the land tax,[6] which he thought might be remedied by assessing every one according to his stock of property.[7]

A few years later the same scheme was propounded in a work written to advocate the taxation of annuities and of shares in the East India Company and in the Bank of England, as well as of moneys at interest.[8] The author's ideal was a "just and equal Tax, obliging all Ranks and Degrees of

[1] He demands that "all the Liquid-Rents be charged to pay either the double, or at least one Third part more than the Land-Rents, which are so sensibly liable to grievous endless Repairs, with abundance of other Charges, vast trouble oft-times in Managing, and by daily sad Experience, severe Casualties and Losses." — *A Letter from a Gentleman to his Friend*, p. 11.

[2] Above, pp. 36 and 63.

[3] *A Letter from a Gentleman in the Country to his Friend in the City: touching Sir William Petty's Posthumous Treatise entitled Verbum Sapienti.* London, 1691, p. 15.

[4] *An Essay upon Taxes calculated for the Present Juncture of affairs in England.* London, 1693, pp. 20–24.

[5] "In a General Tax, if any shou'd be excus'd, it shou'd be the Poor, who are not able to pay, or at least are pinch'd in the necessary parts of Life by paying." — *An Essay upon Projects.* [By Daniel De Foe.] London, 1697, p. vii.

[6] "And not to run on in Particulars, I affirm, That in the Land-Tax Ten certain Gentlemen in London put together, did not pay for half so much Personal Estate, call'd Stock, as the poorest of them is reputed really to possess." — *Ibid.*, p. xi.

[7] "If I were to be ask'd how I wou'd remedy this? I wou'd answer, It shou'd be by some Method in which every man may be tax'd in the due proportion to his Estate, and the Act put in execution, according to the true Intent and Meaning of it; in order to which a Commission of Assessment shou'd be granted to Twelve Men." — *Ibid.*, p. viii.

[8] *An Essay concerning the Necessity of Equal Taxes; and the Dangerous Consequences of the Encouragement given to Usury among us of late Years. With some*

men to pay to the support of the Government in proportion to their share in the Publick, and the benefits they reap from it."[1] This ideal, he thought, could be reached "by taking of Money, according to its product in Interest, as it were so much a year in Land." [2]

The time for such projects, however, had already passed, although the proposition was occasionally revived. Wagstaffe, for instance, at the beginning of the eighteenth century, painted in glowing colors the defects of the existing system.[3] "If a General Excise, and any other Provision for an equal Tax may be feasible," he added, "no Man shall more readily embrace it than myself." In default of any such scheme, however, he outlined his plan for a tax on personal property, and engaged "to shew that it will be so far from being Prejudicial to the Trade of the Nation, that 'tis the only way to Encourage and Support it." [4] In the fifth [5] and sixth [6] dec-

Proposals to promote the Former and give a Check to the Latter. By the author of *The History of the Last Parliament.* London, 1702. This was probably written by James Drake, M.D., although it is also ascribed to Sir Richard Blackmore (as in the Manchester Free Library catalogue).

1 *Ibid.*, p. 5.

2 *Ibid.*, p. 11. "Till such a Scheme for raising Money," he says in another place, "may be contriv'd, as shall reduce Money and Land to a just proportion in the expences of the Nation, the Publick will always lean on the wrong side, and be in a tottering condition." — *Ibid.*, p. 3.

3 *The State and Condition of our Taxes considered; or, a Proposal for a Tax upon Funds: shewing the Justice, Usefulness, and Necessity of such a Tax, in respect to our Trading and Landed Interest, and especially if we engage in a new War*, etc. By a Freeholder [William Wagstaffe]. London, 1714. A similar plan is found in *Fair Payment no Spunge*, etc. 1717. See above, p. 42.

4 *The State and Condition of our Taxes*, p. 16.

5 *Pro Commodo Regis et Populi. Publick Funds for Publick Service, by raising Three Millions of Money, or a Million and a Half, with Ease and Ability, without Charge of Collecting, or affecting Land or Trade, or burdening Tax upon Tax.* In an Appeal to the Impartial and Common Understanding of all Mankind. London, 1744. The author bases his claim on the following argument: "The Land is the Wealth of the Country, has it's natural, and artificial Product, The one the Fruits of the Earth, the other the Manufactures and Labour of it; But if it is solely loaded with constant heavy Taxes, it's Possessors generally will be poor." — p. 19. *Cf.* p. 17.

6 *Thoughts on the pernicious Consequences of borrowing Money.* London, 1759.

ades of the eighteenth century we again meet with allusions to the scheme. But the current of opinion, as well as the actual practice of the day, was so strongly against the scheme of a tax on personal property that very few writers took the trouble formally to refute the reasoning on which it was based.[1] One or two, indeed, attempted to show that the reduction in the rate of interest on the funds was in effect a tax on funds.[2] But such an obviously weak argument was not necessary. Little more was heard of the plan.

[1] A seventeenth-century author of what is probably the first treatise on equal taxation includes in his recommendation of excise a payment also on lands and money. The excise, however, should not be imposed upon "the fundamentalls, as I may terme them, of man's life." For the principle is that "in all matters of Taxes the State lay her Finger on things necessary for man's sustenance and her Loynes on such things as are merely superfluous." *The Standard of Equality in subsidiary Taxes & Payments or a Just and Strong Preserver of Publique Liberty.* London, 1647.

[2] "A Reduction of Interest is to all Intents and Purposes a Tax." — *A Serious Address to the Proprietors of the Publick Funds, occasion'd by several late Schemes for Reducing their Interest or Subjecting them to Taxes: in which the Rights of Publick Creditors are explained and asserted, their just claim . . . to an exemption from Taxes fully demonstrated,* etc. Humbly submitted to the Consideration of the Members of the House of Commons. London, 1744, p. 41. "Those who say that Land and Trade have borne all the Burthen," adds the author, "& that such as have lent their Money to the Publick have paid nothing, really beg the Question, and take that for granted which it is not in their Power to prove, nay the very reverse of which is true." — *Ibid.*, pp. 36, 37.

CHAPTER V

Those who favor a Single Tax on Land

The theory that all taxes are finally shifted to the landowner is commonly ascribed to the Physiocrats. Yet the same theory was expounded in England long before their time. The first inkling of the doctrine is found in a celebrated seventeenth-century tract, in which the author contends that the landowners "bear all the Taxes and publick burthens; which in truth are onely born by those who buy and sell not; all sellers raising the price of their commodities, or abating of their goodness, according to their Taxes." [1]

This theory of incidence was, however, worked out much more fully by John Locke. He lays down his general thesis in the words: "Taxes, however contrived, and out of whose Hand soever immediately taken, do, in a Country, where the great Fund is in Land, for the most part terminate upon Land." [2] To prove this, Locke first attempts to show that a tax levied on the landowner cannot be shifted. If the "country gentleman" actually pays the tax out of his own

[1] *Reasons for a Limited Exportation of Wooll.* 1677, p. 5. The author also states that the landowners "are Masters and Proprietaries of the foundation of all the wealth in this Nation, all profit arising out of the Ground, which is theirs." Therefore it is much more to the interest of the nation to "preserve the Nobility, Gentry, and those to whom the Land of this Country belongs then a few Artificers imployed in working the Superfluity of our Wooll or the Merchants who gain by the exportation of our Manufacture." This tract was written as a reply to *England's Interest by Trade asserted, shewing the Necessity and Excellency thereof,* etc. By W. C. (William Carter), a Servant to his King and Country. London, 1671. It was in turn answered by Carter in *A Reply to a Paper Intituled Reasons for a Limited Exportation of Wooll, or Objections against England's Interest.* London, 1689.

[2] *Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money.* In a Letter to a Member of Parliament. [By

pocket, says Locke, he certainly feels the burden. But "this influences not at all the yearly Rent of the Land, which the Rack-renter or under Tenant pays; it being the same thing to him, whether he pays all his Rent to the King or his Landlord." For the "Tenant's Bargain and Profit is the same, whether the Land be charg'd, or not charg'd with an Annuity payable to another Man." The landowner, in other words, cannot shift a land tax.[1]

But how is it, if taxes are levied not on land but on commodities? A tax on commodities, says Locke, must raise the price of the commodities to the consumer. "Let us see now who at long run must pay this and where it will light." "'Tis plain, the Merchant and Brokre, neither will nor can; for if he pays more for Commodities than he did, he will sell them at a Price proportionably raised." On the other hand, the "poor Labourer and Handicraftsman cannot; for he just lives from hand to mouth already." The consequence of a tax on the laborer will be either that "his Wages must rise with the Price of things, to make him live, or else, not being able to maintain himself and Family by his Labour, he comes to the Parish; and then the Land bears the Burthen a heavier way." But if the laborer's wages rise, the farmer who must pay "more for Wages as well as other things, whil'st he sells his Corn and Wool, either at the same rate, or lower, at the Market (since the Tax laid upon it makes People less forward to buy) must either have his Rent abated, or else break and run away in his Landlord's Debt, and . . . so the yearly Value of the Land is brought down, and who then pays the Tax at the years end but the Landlord?"[2]

A tax on commodities imported, he continues, will always be shifted from the merchant to the consumer. In fact, the importer will generally expect a profit and "raise his price

John Locke.] London, 1692, p. 87. The date of this work is generally given as 1691. But although the epistle dedicatory bears the date of Nov. 7, 1691, the book itself has the imprint 1692. The passage quoted in the text may also be found reprinted in the *Collected Works of John Locke*, 12th edition, 1824, vol. iv, p. 55.

[1] *Some Considerations*, pp. 88, 89.

[2] *Ibid.*, p. 91.

above what his Tax comes to." For "you must not think that the raising their Price will lessen the vent of fashionable, Foreign Commodities amongst you."[1] With the produce of land it is different. "Your Landlord being forced to bring his Commodities to Market, such as his Land and Industry afford him, common and known things, must sell them there at such price as he can get." When a tax is laid on these "homebred Commodities," which are seldom "the Favourites of your people, every one makes as sparing a use of them as he can;" prices will fall and rents will decrease.

Hence Locke concludes in the famous passage: "It is in vain, in a Country whose great Fund is Land, to hope to lay the publick charge of the Government on anything else, there at last it will terminate. The Merchant (do what you can) will not bear it: the Labourer cannot, and therefore the Land-owner must; and whether he were best to do it, by laying it directly where it will last settle, or by letting it come to him by the sinking of his Rents, which when they are once fallen, every one knows are not easily raised again, let him consider."[2]

Locke's theory was soon accepted by a number of writers. One of the earliest was the renowned financier Davenant. But while Davenant accepts Locke's theory of incidence, he does not draw the conclusion that it is advisable to levy a single tax on land. For instance, he intimates in one place that it may be wise to supplement the land tax by a "tax on money."[3] He is also quite a partisan of the excise, and asks "Can any tax be more reasonable?" He thinks, however, that "the proper commodities to lay excises upon are those which serve merely to luxury, because that way the poor would be least affected."[4] Even here, however, he believes

[1] *Some Considerations*, pp. 92, 93.

[2] *Ibid.*, p. 95, 96. This is the first instance in English literature of any allusion to the term "direct taxes."

[3] See above, p. 97.

[4] *An Essay upon Ways and Means of supplying the War.* [By Charles Davenant.] London, 1695. In the *Collected Works* of Davenant, edited by Whitworth, London, 1771, vol. i, pp. 65, 66; or p. 130 of the original.

that excises also fall ultimately on land, even if with somewhat less crushing force than a direct land tax.[1] Davenant, in fact, holds that the farther off taxes are laid from the producer, the smaller will be their tendency to rest on the land.[2] But this tendency, he admits, cannot be entirely arrested; and he does not shrink from stating that "all taxes whatsoever are in their last resort a charge upon land."[3] So also Asgill[4] and Cantil-

[1] "Though excises will affect land in no degree like taxes that charge it directly, yet excises will always lie so heavily upon the landed man, as to make them concerned in parliament, to continue such duties no longer than the necessity of the war continues." — *An Essay upon Ways and Means*, p. 77.

[2] "All excises should be laid as remotely from land as possible; it is true they yield less when so put, because the first maker is best come at; but when the last manufacturer or vender is charged, they lie with most equality upon the whole body of the people, and come not upon land in so direct a manner." — *Discourses on the Publick Revenues and on the Trade of England.* London, 1698. In *Collected Works*, i, p. 224; or part i, p. 151 of the original.

In a later work, Davenant neglects this aspect of the excises, and emphasizes their injurious results to trade. "There is scarce any of these new Revenues, which do not give Trade some desperate Wound. The Additional Duties on Beer and Ale, and the Tax upon Malt are apparently a Burthen upon the Woollen Manufactures, affecting the Carder, Spinner, Weaver and the Dyer, who all of them must be rais'd in their Wages, when the Necessaries of Life are rais'd to them. The Consequences of which will be, That our Woollen Goods must come at a heavy and disadvantagious Price into the Foreign Markets." — *An Essay upon the Probable Means of making a People Gainers in the Ballance of Trade.* By the author of the *Essay upon Ways and Means.* London, 1699, p. 145. This passage is quoted in a later tract: *Dr. Davenant's Opinion Anent the Salt and Malt Taxes in England.* London, 1706. *Cf.* also a passage much quoted at the time of Walpole's Excise scheme: "This may be generally said, That all Duties whatsoever, upon the Consumption of a large Produce, fall with the greatest Weight upon the Common Sort; so that such as think in new Duties that they chiefly tax the Rich, will find themselves quite mistaken; for either their Fund must yield little, or it must arise from the whole Body of the People, of which the richer Sort are but a small Proportion." This passage is quoted on the title-page of *The Nature of the Present Excise and the Consequences of its farther Extension examined.* London, 1733.

[3] *An Essay upon Ways and Means. Collected Works*, i, p. 77; or orig., p. 153.

[4] *Several Assertions Proved in order to Create another Species of Money than Gold or Silver.* By John Asgill. London, 1696, esp. p. 20. "Man deals in nothing but Earth; the Merchants are the Factors of the world to exchange one parte of the earth for another. The King himself is fed by the labour of the ox and the Cloathing of the army and the Victualing of the navy, must all be paid

lon[1] were worthy precursors of the Physiocrats, so far as they asserted that land was the real foundation of all wealth, and therefore ultimately bore the weight of all taxes.

In the early decades of the eighteenth century, Locke's theory is frequently encountered. Some authors, like Wood, were quite content simply to quote his views.[2] Others sought to add to Locke's argument. One writer, who accepts the general theory, boldly takes issue with the doctrine as expounded by Davenant, and maintains that the more indirect the tax, the worse it will be for the landowner.[3] Another writer, whose pages are filled with quotations from Locke, does not deny that excises add to the price paid by the consumer, but thinks that the producer also pays the tax, at all events in part.[4] He seeks to prove this by an inductive study of

for to the owner of the soil as the ultimate Receiver, and whatever the ultimate Receiver will demand or accept must be a rule for the intermediate Receivers to govern themselves by." Asgill was first quoted by Lauderdale in *An Inquiry into the Nature and Origin of Public Wealth.* London, 1804, p. 113.

[1] Cantillon, *Essai sur la Nature du Commerce en Général*, 1755. (Translation of the English work written before 1734 but not published.) See esp. chap. xii: "Tous les Ordres et tous les Hommes d'un Etat subsistent ou s'enrichissent aux dépens des Propriétaires des Terres."

[2] *A Letter to a Member of Parliament: shewing the Justice of a more equal and impartial Assessment on Land: the Sacredness of Publick Engagements: the Advantages of lowering the Customs and high Duties on Trade: And the Ease of reducing by Degrees the Debts of the Nation.* London, 1717, esp. pp. 7 and 28. If this pamphlet was not written by William Wood, he must be accused of plagiarism. For in a large work of the next year, which Wood wrote, we find whole pages on the subject of taxation, including extracts from Locke, copied word for word from the pamphlet, without mentioning it at all. *Cf. A Survey of Trade in Four Parts . . . together with Considerations on our Money and Bullion.* [By William Wood.] London, 1718, pp. 68–72, where pp. 5–8 of the pamphlet are copied bodily. Wood, however, does not go quite as far as to advocate the single tax on land. He simply objects to taking off any taxes on land.

[3] "If Land Owners can and do prevent the Load of a Tax from falling directly and immediately on themselves, yet in the last Resort there it will fall, let them shift it seemingly as far off as they will in the first Imposition; and perhaps just so much farther off from them as it is laid in the first Instant, and according to common View and Estimation, just so much the more heavily it comes upon them at the last." — *An Essay on Leases and Annuities.* London, n.d. [*circa* 1730], p. 109.

[4] "There is no Doubt but the last Retaler of excisable Goods makes an Addi-

the malt tax. The same result, he thinks, is clear from a scrutiny of the "duty on lights," which was intended as a tax on the tenant, and yet turned out to be a tax on the owner.[1] "In this Instance," says our author, "we see how readily and quickly the Tax centers in the Landlord; from whence one would suspect that this is the Case in most of the excisable Goods."[2] "The many windings and turnings in Trade," he concludes, "may make it longer e'er the Tax reaches the Landholder, and may prevent our discovering how it takes its Course, yet there it must and does come at last."[3]

At the time of Walpole's excise scheme, it was but natural that this view should again be emphasized. One of the disputants sought to crush his adversary by stating that "it hath been fully proved by unanswerable Authority that all Taxes, in this Kingdom, must ultimately affect Land."[4] Another writer stated somewhat less emphatically: "But if Mr. Locke's Reasoning be true (as it still appears to be, notwithstanding what has been urged against it), that all Duties on Commodities of home Consumption terminate on the landed Man," the ordinary objections to the excise are invalid.[5] But after Locke, the theory was most fully explained at about the same time, although independently of

tion to the Price of them, equal to the Tax laid upon them; and yet I am afraid that the first Producer pays it likewise, so that in the Event 'tis twice paid." —*Some Thoughts on the Interest of Money in General, and particularly in the Publick Funds, With Reasons for Fixing the same at a lower Rate, in both Instances, with Regard especially to Landholders.* London, n.d., p. 93. This work, as appears from internal evidence, was published between 1728 and 1739. The quotations are made from the second edition.

[1] "The Custom in some Places, I may say in some Countries, is to throw it on the Owners, and they discount it as regularly as they do the Land Tax." —*Ibid.*, p. 94.

[2] "Since the Pretext of the Duty," he adds, "is so good a Handle to beat down the Price of them in the Hands of the first Producer." —*Ibid.*, p. 95.

[3] *Ibid.*, p. 95.

[4] *A Review of the Excise-Scheme; in Answer to a Pamphlet, intitled The Rise and Fall of the late projected Excise, impartially considered.* [By Pulteney?] London, 1733, p. 22.

[5] *A candid Answer to a Letter from a Member of Parliament to his Friends in the Country concerning the Duties on Wine and Tobacco.* London, 1733, p. 35.

the excise controversy, by Vanderlint, with whose views on the subject of the workingman we have already become acquainted.[1]

Vanderlint contends that if all the existing taxes were suddenly to be abolished and to be replaced by a tax on real estate, the benefit would still inure to the landowner. His argument is as follows: prices of commodities, when freed from taxation, either will remain the same or will fall. If they remain the same, — assuming also that there has been no change in the money supply, — the cost of production will decrease, because of the abolition of the tax on the producers. The difference between cost and price, however, is rent. Hence, the only result will be to increase the rent of the landowner.[2] On the other hand, if the prices fall, demand will increase. But, since all commodities, in last resort, come from the land, this increased demand means higher rent.[3] Thus, from either point of view, remission of taxes redounds to the welfare of the landlord. In other words, the incidence of all taxes is on the land. Vanderlint accordingly proposed a single tax on land, as at once far cheaper and far better than the existing complicated and inconven-

[1] *Money answers all Things*, etc. By Jacob Vanderlint. London, 1734. For the full title, see above, p. 58.

[2] "Suppose the Cash, amongst the People in general, to be what it now is; and that all the Taxes were taken off Goods; it's evident, this would not, in the End, lower the Price of Goods to the Consumers; since that Price . . . depends on the Quantity of Money circulating amongst the People: But if the Duties were taken off Goods, they must cost as much less than they do now, as the Taxes now on them . . . now enhance them; therefore, I think, if the Taxes were taken off Goods and laid on Lands and Houses only, so much more Money must in this Case come to the Hands of the Farmers for the Produce of the Ground, as would enable them to pay as much larger Rents." — *Ibid.*, pp. 112, 113.

[3] "If the Taxes were taken off Goods, they would come Cheaper, and Cheapness would increase the Consumption, as Cheapness of everything always doth; and that Increase of the Consumption would increase the Demand for those Things. Now since everything is the Produce of the Ground, the Demand for the Produce would increase the Demand for Land, and that would necessarily raise the Rent, even till all the Money now paid for Taxes, together with all the Charge they are necessarily attended with, would come into the Landlords Pockets for Rent." — *Ibid.*, p. 114.

ient taxes, which after all, in his opinion, finally fall on land.

This view of the incidence of taxation occasionally appeared in subsequent decades. Thus, during the forties,[1] one writer seeks to prove at some length that not only do "Taxes laid upon our Home consumption centre chiefly in the Land-owner," but "the same must be true of the, any other way, advanced Price of the Necessaries of Life." Another writer of the same date states: "It is now no longer a Question; all men are convinced, and see clearly, that all Taxes . . . do either immediately, mediately, or ultimately, fall upon the Land-Holder."[2] The same doctrine was again presented to the English public, although in an alleged translation from the French, as late as the decade immediately preceding Adam Smith, in the following statement: "Since the time of that great metaphysical legislator, Locke, it is an acknowledged and adopted principle of all who reflect with any perspicuity, that the weight of every tax upon consumption, ultimately falls and sets heavy on the proprietors of the soil."[3] It was advanced, almost for the last time, a few years later by a writer with the following introductory passage: "From thus tracing the operations of a tax laid on trade and labour, it may be well worth observing in what manner it is made to fall back again upon the lands with increased weight, as it will serve to demonstrate the accuracy of Mr. Locke's judgment."[4] This confidence was shared by few writers,

[1] *The State of our Wool and Woollen Trade Review'd. Wherein some Objections to the Grasier's Advocate are consider'd*, etc. London, 1743, p. 47.

[2] *The Axe (once more) laid to the Root of the Tree*, etc. London, 1743, p. 6. For the full title, as well as for some other views of the author, see above, p. 71.

[3] *A General View of England; Respecting its Policy, Trade, Commerce, Taxes, Debts, Produce of Land, Colonies, Manners, etc., etc. Argumentatively stated from the Year 1600, to 1762;* In a Letter to A. M. L. C. D. By M. V. D. M. [M. Vivant de Mezagnes.] Now translated from the French, first printed in 1762. London, 1766, p. 17. *Cf.* p. 200.

[4] *Considerations on the Effects which the Bounties granted on exported Corn, Malt and Flour, have on the Manufactures of the Kingdom and the true Interests of the State.* London, 1768, p. 32. The author is opposed to the entire bounty system. One of the earliest criticisms of bounties will be found in

largely for reasons which were nowhere more vigorously put than by an author who characterized the doctrine as "most apparently and demonstrably false." "If a Tax is laid on Soap," he asks, "is no body's Linnen wash'd but the Land-Owner's? Or if a Tax is laid on Leather, does every body walk barefoot but the Land-Owner?" "No Proposition in Euclid," he adds, "can be clearer than that by taxing the Land, when you cannot tax the Funds, you tax but one of them; and that if you tax the Things they equally use and consume, you tax them both." [1]

Ill-Judged Bounties tend to Beggary on both Sides: or Observations on a Paper intituled Reasons for laying a Duty on French and Spanish Indico and granting a Bounty on what is made in the British Plantations. London, 1748, esp. pp. 11–12.

[1] *A Letter to a Country Gentleman on the Revenue of the Salt Duty.* London, 1732, pp. 25–26.

CHAPTER VI

Those who favor a More Eclectic System

For some time after Locke's theory of the single tax on land had been propounded, there was but little opposition either to the scheme or to the theory of incidence on which it was based. This was no doubt owing to the fact that the plan was never seriously considered by the political leaders. But when Walpole put forward his excise scheme, the problem of incidence became a burning question. Several writers not only denied the general theory of the shifting of all taxes to land, as we have just seen, but maintained that the land tax itself did not rest on the land.

Walpole himself is supposed to have been the author of a tract in which the theory is advanced that a tax on land is shifted to the consumer. "The Land-tax," he says, "falls heavily upon the People, by heightning the Rents of Lands, and consequently of Bread and Drink, and other Food: So that what the Land pays, the People too pay." [1] Another writer who favors the excise thinks that "where the Land is not Taxed, doubtless the Charge of Pasturage, and the Price of Provisions, will be less in proportion." [2] He considers the reduction of the land tax desirable for other reasons also, because "even the Labourer will find it for his Benefit; since, according to that Money which the Landed Man can spare, the Labourer will be employed." [3]

[1] *Some General Considerations concerning the Alteration and Improvement of Publick Revenues.* [By Sir Robert Walpole.] London, 1733, p. 9.

[2] *A Letter to a Freeholder on the Late Reduction of the Land Tax to One Shilling in the Pound.* By a Member of the House of Commons. London, 1732, p. 21.

[3] *Ibid.*, p. 39. The author favors a tax on salt for the following remarkable reason: "All Men use Salt in proportion to their Ability, but all Men do not hold

The fullest expression of this view is found in the work of an anonymous pamphleteer who addressed himself primarily to the question of incidence.[1] He opposes the taxation of land, and incidentally favors the excise scheme, because the land tax is, in his opinion, shifted to the consumer. The smaller the land tax, the lower will be the price of provisions. This means lower money wages for the workman, and this, again, will enable the employer to compete with foreigners.[2]

In another passage, the author states outright that "a Land-Tax, which affects all the common Necessaries of Life of our own Production, is an actual general Excise, in the strict Sense of the Words." He therefore favors a scheme like Walpole's, because "it is a particular Excise upon foreign Superfluities and Luxuries, with a View to take off a general Excise from the common Necessaries." [3] Later on, again, the author tries to show in considerable detail how a tax on land will raise the price of all manufactured products, as well as of the produce of the soil. He concludes that "whatever Tax be laid upon Land, the Rents and Produce thereof will

Land: to Multitudes of the former, there are very few of the latter . . . Is it not then much more equal and righteous that we should tax every Man a little in proportion to his Ability, than that we should tax a very few Men in a great Degree, far beyond the Proportion of their Ability?" — *A Letter to a Freeholder*, pp. 28, 29. A somewhat similar defence of the salt duty is found in another tract entitled *A Vindication of the Conduct of the Ministry, in the Scheme of the Excise on Wine and Tobacco*, etc., etc. London, 1734. The author favors the salt tax: "first that Duty is payed universally over the whole Nation and that it costs but little to every one in particular." — *Ibid.*, p. 57.

1 *Englishmen's Eyes open'd; or All made to SEE, who are not resolv'd to be BLIND: Being the Excise Controversy set in a new Light; completely discuss'd upon the just Principles of Reasoning, and brought to a fair and demonstrative Conclusion: between a Landholder and a Merchant.* London, 1733.

2 "By easing the Land, the Price of all the common Necessaries and Conveniencies of Life become cheaper; . . . when a Land-Tax is taken off, Landlords may afford to ease their Tenants, and they of course will ease the Poor in the Price of the Production of their Lands. The Poor, when they can live cheaper, will work cheaper; and our Manufactures will consequently be exported cheaper." — *Ibid.*, p. 7.

3 "Far from having a Tendency," he continues, "to what the Judicious understand by a general Excise, no Step could possibly be taken more effectually to free us from a general Excise." — *Ibid.*, p. 15.

be in a continual Flux of Raising, till the Landlord finds his Gains to be as great after the Deduction of that Tax, as before it was imposed." [1] He discusses at some length the argument of "Mr. Lock," but thinks that "gentlemen have wrested the Sense of this great Author, and made him speak their Sentiments, not his own." [2]

These writers, as we have seen, opposed the land tax, because, among other defects, it was shifted to the consumer. But others who held the same doctrine of incidence drew precisely the opposite conclusion, favoring the land tax and trying to make it popular with the farmers and with the land-owning legislators, just because it would not fall on them. Thus the author of an interesting tract [3] thought that the landlords raised their rents by the amount of the land tax, but that the farmers did not suffer, because they simply added the tax to the price of their products, the weight of the tax thus resting at last on the consumer.[4]

The theory that the land tax is shifted to the consumer was, as we know, a favorite doctrine of Petty.[5] It ran counter, however, not only to the popular understanding, but to the ideas of most of the writers that discussed the land tax, who opposed or favored it according to their views as to the desirability of taxing the landowner. Thus, in the seventeenth

[1] *Englishmen's Eyes Open'd*, p. 54. [2] *Ibid.*, p. 57.

[3] *The Nature of the Present Excise, and the Consequences of its farther Extension, examined.* In a Letter to a Member of Parliament. London, 1733. The author is noteworthy as being one of the first to propound the capitalization theory of the land tax. See below, book ii, chap. iv.

[4] "All the Gentlemen . . . have had frequent opportunities of re-setting their Lands, and have indemnified themselves by raising their Rents. The Farmers themselves have not felt it much, because they have raised the Price of Provisions likewise in Proportion, as their Landlords have raised their Payments; so that the greatest Burthen has lain all along upon the Consumer, who in Nine Instances out of Ten, is a Labourer or Manufacturer."—*Ibid.*, p. 38. The same doctrine was expounded later on in the work entitled *Manufactures Improper Subjects of Taxation. Addressed to the Merchants and Manufacturers of Great Britain; being an Attempt to prove that the Riches and Power of the Nation depend in a great degree upon Manufactures being free from all Taxation. Pluck the Fruit but do not injure the Root of the Tree.* London, 1785, esp. p. 34.

[5] See above, p. 31.

century, one pamphleteer strongly upheld the land tax,[1] while Reynell as vigorously objected to it,[2] but neither imagined for a moment that the tax would not rest where it was imposed.

Again, at the time of the excise scheme most of those who favored the excise did so because they desired to relieve land from the burdens resting on it. As one of the writers put it: "A Tax imposed upon Land, is utterly unavoidable. Let a Freeholder be in narrow circumstances, let him have a large Family, let him be a frugal Man, or let his Case be what he will, he cannot help himself by any Abatement of this Charge upon his Income. Such an Estate is loaded with such a Burden, which no Management can lighten."[3]

With the greater diversity of taxation in the eighteenth century, the controversies over the incidence of taxation soon covered more ground than the land tax. With this widening

[1] "It is humbly offered and submitted, whether there can be any way in the World found, more certain, equal, and easie, to raise the same (Money), than by a Land-Tax: for then they will know what it is they give, when and how certainly it will come in, and the time when the same will end." — *The Grand Concern of England; explained in several Proposals offered to the Consideration of the Parliament.* By a Lover of his Countrey and Well-wisher to the Prosperity both of the King and Kingdoms. London, 1673, p. 3.

[2] "Taxes were better raised any way than from the Land, for that drains Money out of the Country which seldom or never returns . . . There might be waies found out, that no Taxes might ever be laid, on the substantial part of the Nation, Country, or City, Land, or Houses." — *The True English Interest, or an Account of the Chief Natural Improvements.* By Carew Reynell. London, 1674, chap. 25: "Kings Revenue, Taxes, Customs," pp. 68, 69. His scheme was to lay a tax "only on the vices of the People, as on all Taverns, Ale Houses, Foreign Needless Commodities and on debauched persons." To this he added a tax on bachelors, and high customs duties which he thought would be paid by the foreigner.

[3] *A Letter to the Free-holders of Great Britain.* London, 1733, p. 27. "But Wine and Tobacco," he adds, "are things of quite another Kind . . . A Man may either live comfortably without them, or lessen his Expences in them, as he sees convenient." *Cf.* for similar views as to the land tax *A Letter from a Member of Parliament for a Borough in the West, to a Noble Lord in his Neighbourhood there, concerning the Excise-Bill and the Manner and Causes of Losing it.* London, 1733, p. 27. See also *The Rise and Fall of the late Projected Excise, impartially consider'd.* By a Friend to the English Constitution. London, 1733, pp. 13, 15, 27.

of the field, the opposition to Locke's theory of the single tax grew apace. Nugent, for example, the author of a widely read monograph, maintains that "Mr. Locke's position, taken in its full extent and without any limitations, is greatly controvertible," and "that the maxim seems to go farther than reason and experience will warrant."[1] He does not object to the statement that a tax laid upon farmers' produce "makes people less forward to buy"; but he does not see "why that reason should not have the same operation upon other commodities." The demand for commodities, he thinks, depends "on the quantity of money subsisting in the market"; and if this quantity is unchanged, an increased tax on the general trader must diminish mercantile profits.[2] The same argument which proves that a land tax cannot be shifted equally shows that a tax on traders' profits can likewise not be shifted. Nugent, however, makes one notable exception, maintaining that it is useless to try to tax "moneyed men" on their personal property. For, says he, taxes on mortgages or on the public funds would be shifted to the mortgagor or to the public, respectively, through a corresponding increase in the rate of interest.[3] Finally, he objects to any further increase of the excise taxes, opposing the view that higher taxes will induce the poor to work.[4] Therefore, while he is confessedly not an advocate of any single tax on land, he objects to a lowering of the land tax, which would involve a further increase in the taxes on trade and commodities.

[1] *Considerations upon a Reduction of the Land Tax.* [By Robert Nugent.] London, 1749, p. 9.

[2] "And if additional taxes be laid, while the money, with which commodities are to be purchased, remains unincreased, the traders must be contented with smaller gains, or not trade at all. And the first part of the alternative will always be the case, where the profits of a flourishing trade may well support some diminution." — *Ibid.*, p. 14.

[3] "Were mortgages, or the funds, to be taxed, matters would not be mended. For, as taxes, wherever placed, can have no tendency to lower the interest of money; they, who buy into the funds, would buy so much cheaper as the tax would amount to, and the lender upon mortgages insist upon a higher rate of interest." — *Ibid.*, p. 25.

[4] See above, p. 58.

In a later monograph Nugent returns to the charge and speaks of the absurdity of those who "contend for an Abatement of that Tax, preferable to all others, the cheapest levied, producing most, and the least felt, of any. And such, incontestably, is the Land-tax; which, bating the Word, affects that Interest, which opposes it strongest, less, than any other Tax in like Proportion of Quantity and neat Produce." [1]

The general doubt as to the truth of Locke's theory is seen in a number of other works. Thus an anonymous writer of about the same period maintains that the existing taxes affect not only the landowner, but also the laborer and the trader.[2] In former times, he says, "when taxes were very moderate, because they were so, the necessaries of Life were cheap; Labour was so. The consequence of which was, that we were enabled to work up our Manufactures so moderately cheap as to command most of the Markets of the World." [3] A little later Postlethwayt refers to the opposition to Locke's theory, without attempting, however, to give his reasons.[4] Another writer refers more specifically to Locke's doctrine that taxes on commodities are indirect taxes on land.[5] This he thinks a mistake, not only because wages do not rise proportionately with taxes on labor, but also because trade is able to shift the burden of taxes to the consumer. It is

[1] *Further Considerations upon a Reduction of the Land-Tax: Together with a State of the Annual Supplies of the Sinking Fund, and of the National Debt, at various future Periods, and in various Suppositions.* [By Robert Nugent.] London, 1751, pp. 90, 91.

[2] *Britannia in Mourning: or a Review of the Politicks and conduct of the Court of Great Britain with Regard to France, the Ballance of Power, and the True Interest of these Nations . . . and likewise a View of the present State of our Liberties and Trade, compared with what they have been*, etc. In a Dialogue between two ancient Patriot Englishmen, commonly known by the names of, Jest and Earnest. London, 1742.

[3] *Ibid.*, pp. 13, 14.

[4] "If Mr. Locke's Observation, that all Taxes in general ultimately terminating upon landed (*sic*) should be exceptionable, as some think it, yet," *etc.*—*Great Britain's True System*, etc. By Malachy Postlethwayt. London, 1757, p. 306.

[5] *Considerations on the Policy, Commerce and Circumstances of the Kingdom.* London, 1771, chap. viii: "On Taxes," p. 60.

the workman, not the landowner, upon whom the weight finally rests.[1]

The most famous opponents of the single tax on land, however, were the two chief economists of the third quarter of the eighteenth century, Hume and Steuart. Hume attacks Locke's doctrine on the ground that every one tries to shift the tax to some one else; and that there is no reason to suppose that the landowners are weaker in this respect than other classes of society. "Every man, to be sure," says Hume, "is desirous of pushing off from himself the burthen of any tax, which is impos'd, and laying it upon others: But as every man has the same inclination, and is upon the defensive; no set of men can be suppos'd to prevail altogether in this contest. And why the landed gentlemen shou'd be the victim of the whole, and shou'd not be able to defend himself, as well as others are, I cannot readily imagine."[2] Hume thinks that the principle "tho' first advanc'd by a celebrated writer, has so little appearance of reason, that were it not for his authority, it had never been receiv'd by anybody."

In another celebrated passage, Hume discusses the maxim of the "ways and means men," which he accepts in part "that every new tax creates a new ability in the subject to bear it." He points out that the consequences of laying a tax

[1] "Mr. Locke was of opinion, that taxes upon commodities affect the landed interest more than if laid directly upon land; which would be a good deal the case, if the prices of labour were raised proportionally to the increase of taxes; but that has not been done in this country. There is indeed no taxing of traders in the articles of their traffic, because they are, and ever will be, the raters of the values of their own commodities: so that experience shews, for a small tax laid on any thing they deal in, they will make a large consideration in price. Thus those whose single commodity is labour; are taxed by government, directly for their windows, for statute-work and most commodities they consume, and they are indirectly taxed by land-owners in the increase of farm-rents, because the farmer raises proportionally the prices of his commodities; while other dealers add to the taxes that are laid on the commodities they sell, another to themselves in the prices which they exact; without workmen having any advance in their own wages that is equivalent." — *Ibid.*, pp. 60–62.

[2] *Political Discourses*. By David Hume, Esq. Edinburgh, 1752. Chap. viii: "Of Taxes," p. 121. The quotations are from the second edition, published in the same year.

on commodities consumed by the common people are ordinarily supposed to be a diminution of wages so that the laborer bears the burden himself, or an increase of wages whereby the burden is shifted to the employer. "But," he adds, "there is a third consequence, which very often follows upon taxes, *viz.*, that the poor encrease their industry, perform more work, and live as well as before, without demanding more for their labour." [1]

Hume here seems to share the opinion already discussed,[2] that taxes act as a spur to industry. But if his reasoning be attentively considered, it will be seen that he is not willing to push the theory very far. For in the first place, he limits the doctrine to taxes other than those imposed upon necessaries of life; and, secondly, even as to these he is doubtful. "This doctrine," he tells us, "may be admitted in some degree: But beware of the abuse. Exorbitant taxes, like extreme necessity, destroy industry, by engendring despair; and even before they reach this pitch, they raise the wages of the labourer and manufacturer and heighten the price of all commodities. An attentive, disinterested legislature will observe the point, where the emolument ceases, and the prejudice begins." [3]

The fullest discussion of the incidence of taxation before

[1] "Where taxes are moderate," he goes on to say, "and affect not the necessaries of life, this consequence naturally follows; and 'tis certain that such difficulties often serve to excite the industry of a people, and render them more opulent and laborious than others, who enjoy the greatest advantages." — *Political Discourses*, p. 115.

[2] Above, pp. 48–55.

[3] *Ibid.*, p. 118. Bastable, *Public Finance*, book iii, chap. ii, § 3 (3d ed., p. 284), scarcely does Hume justice in making him appear as a partisan of the doctrine. — Somewhat analogous to the doctrine that taxes on production are a spur to industry, is the theory that taxes on consumption increase the quantity of commodities consumed. We find this theory, not indeed in its extreme statement, but in a modified form, formulated by Arthur Young as follows: "Render any thing by taxes something more of a distinction than formerly, and you will find that the tax, instead of checking, will increase the consumption." *Political Arithmetic*, 1774, p. 217. The same observation is found in the anonymous pamphlet *Inquiry into the Connection between the Size of Farms and the present Price of Provisions*. London, 1773.

Adam Smith is to be found in the works of Sir James Steuart.[1] He divides all taxes into three kinds, — proportional, cumulative and personal. Proportional taxes are those that fall upon expense (what we should call indirect taxes); cumulative or arbitrary taxes are those that affect property; and personal taxes are those that consist of personal services.[2] Proportional taxes, he says, are always "drawn back" (that is, shifted) by the industrious consumer. Steuart thinks a consumer "industrious" in all cases, except when the "consumption made by the latter is an article of superfluity." In other words, taxes on the necessaries of life are shifted from wage-earner to employer because the wage-earner is a "physical necessarian" who accumulates no profits;[3] but if the laborer spends his money on taxable articles which other members of his class do not use, he cannot shift the tax.

Steuart illustrates this point as follows: "A tanner sells his leather to a shoemaker; the shoemaker, in paying the tanner for his leather, pays the tanner's subsistence and profit, and the tax upon leather. The man who buys the shoes for his own consumption, refunds all this to the shoemaker, together with his subsistence, profit, and the tax upon shoes; consequently, the price of shoes are (*sic*) raised, only by refunding the taxes paid by the industrious. But if the shoemaker's subsistence shall happen to include either tavern expences, or his consumption on idle days, he will not draw these back; because other shoemakers who do not frequent the tavern, and who are not idle, will undersell him." All proportional

[1] *An Inquiry into the Principles of Political Œconomy: being an Essay on the Science of Domestic Policy in Free Nations.* By Sir James Steuart, Bart. London, 1767, book v, chaps. iii–vi, "Of Taxes, and of the proper application of their amount." In the edition of his *Collected Works*, published in six volumes in 1805, the subject is contained in vol. iv. The quotations here are from the original quarto edition, vol. ii.

[2] "A proportional tax is that which is levied upon the idle consumer, at the time he buys the commodity." "A cumulative tax, is the accumulation of that return which every individual, who enjoys any superfluity, owes daily to the state, for the advantages he receives by living in the society." — *Ibid.*, ii, p. 500.

[3] *Ibid.*, ii, p. 491.

taxes, therefore, fall at last upon "the rich and idle consumer of the manufacture, who can draw nothing back from anybody. . . . The whole reimbursement of all former payments and repayments lands upon him." Hence Steuart concludes, "How absurd therefore, is it either to say that all taxes fall ultimately upon land; or as others, for no better reason, pretend, that they fall upon trade." "Proportional taxes never can fall either upon, or affect any person but the idle; that is to say the not industrious consumer."[1]

With regard to what he calls cumulative taxes, Steuart lays down the general rule that "the nature of all these taxes, is, to affect the possessions, income and profits of every individual, without putting it in their power to draw them back in any way whatever; consequently, such taxes tend very little towards enhancing the price of commodities."[2] These taxes ought, therefore, in his opinion, generally to be discountenanced. Taxes on land, he thinks, do not augment the price of wheat as similar taxes on commodities raise the price of excisable goods; for, if the proprietor were to attempt to raise the price of his grain in proportion to the tax, his farmer who pays no land tax would undersell him.[3] All attempts to levy a tax on money, however, he regards as certain to fail. A tax on trade profits, again, although it tends to rest on profits, is not to be recommended, because, "although they appear to be income, I rather consider them as stock, which ought not to be taxed."[4] Steuart's final conclusion is expressed in these words: "I conclude that no objection can lie against proportional taxes, so far as they affect the industrious; because they draw them compleatly back: and that great objections lie against cumulative taxes, when they affect the industrious, because they cannot draw them back; and consequently, they may affect the physical-necessary of the contributor, in case no profit should remain to him upon his labour. On the other hand, I think little objection can be made to cumulative taxes, when they are

[1] *An Inquiry into the Principles, etc.*, ii, p. 494. *Cf.* ii, p. 510.
[2] *Ibid.*, ii, p. 496. [3] *Ibid.*, ii, p. 552. [4] *Ibid.*, ii, p. 541.

imposed upon possessions, which produce a visible annual revenue, clear to the proprietors." [1]

It is clear, therefore, that by the third quarter of the eighteenth century the economists, although differing among themselves, were united in opposing Locke's theory of the shifting of all taxes to land. It is no wonder that Dugald Stewart wrote, a few decades later, in reference to the plan of the single tax on land: "I shall only remark, that the first idea of it was borrowed from this country, where it has been repeatedly suggested by authors of reputation, although it had been almost forgotten as an exploded chimera, when it was revived by the Economists of France." [2] And Arthur Young wrote: "I know not whether Mr. Locke were the original father of the doctrine, that all taxes, laid in any manner whatsoever, fall ultimately on land; but whoever started or supported it, contributed towards the establishment of one of the most dangerous absurdities that ever disgraced common sense." [3]

We have now completed our examination of the early literature on taxation. We have limited ourselves to England for two reasons: first, because most of the fiscal writings, as well as those on economics in general, are to be found in England; and, secondly, because the scantier literature of the continent is very much better known. The continental literature, however, so far as it discussed the incidence of taxation at all, confined itself chiefly to generalities on the question of direct *versus* indirect taxation, and more specifi-

[1] *Ibid.*, ii, p. 519.

[2] *Lectures on Political Economy* [delivered in 1800–1801]. *Now first published.* By Dugald Stewart. Edited by Sir William Hamilton. Edinburgh, 1855, reprinted 1877, ii, p. 238.

[3] *Travels in France.* By Arthur Young. London, 1792, i, p. 526. Young adds, in reference to the idea of the single tax: "Taxes should bear lightly on an infinite number of points, heavily on none. In other words, simplicity in taxation is the greatest additional weight that can be given to taxes and ought, in every country, to be most sedulously avoided." — i, p. 531. In an earlier work, *Political Arithmetic*, London, 1774, Young discusses Locke's theories at some length. *Cf.* pp. 211 *et seq.* Some of the more timid spirits who stood in great

cally to the effects of the excise. In France the two attempts to develop a theory of fiscal reform that were made by Boisguilbert and Vauban [1] met with such little favor in court circles that a quietus was put on the discussion of the topic for more than half a century. In Germany the only treatment of the subject, apart from the monotonous productions of the "Cameralistic" writers, is found in the controversialists on the scheme for the general excise at the close of the seventeenth and the beginning of the eighteenth centuries.[2] In Italy the number of authors was perhaps more numerous, but their influence was small.[3]

In our survey of the English literature, we have found almost as many views as there were writers. That taxes remain where they are imposed, that all taxes are shifted to the landowner, that they are shifted to the trader, that they rest on the laborer, that they rest on the rich consumer, that they do not rest on the consumer at all — these, and variations of these, doctrines meet us in bewildering confusion. Yet even here certain currents of thought may be discerned, and the attempt has been made in the preceding pages to point out the general direction of these currents. The great weakness in all the discussions, however, was the lack of any consistent economic theory in general, and of a theory of

awe of Locke's reputation did not dare to impugn the theory although they clearly showed that the facts were not in harmony with it. Thus one writer says: "The opinion of that great man will remain good in theory, but it cannot be practical." — *Half an Hour's Advice to Nobody Knows Who.* London, 1767, p. 13.

[1] Boisguilbert wrote the *Détail de la France*, 1697, and *Factum de la France*, 1707. Vauban wrote the *Projet d'une Dîme Royale*, 1707. Vauban's work was translated into English under the title *An Essay for a General Tax; or a Project for a Royal Tythe.* By the famous Monsieur Vauban, Marshal of France, etc. London, 1709. The translation was widely read and went through several editions.

[2] For these writers see "Der Accisestreit deutscher Finanztheoretiker im 17. und 18. Jahrhundert." Von Karl Th. von Inama-Sternegg. In the Tübinger *Zeitschrift für die gesammte Staatswissenschaft*, vol. xxi (1865), pp. 514–546. *Cf.* also *Geschichte der National-ökonomik in Deutschland.* Von Wilhelm Roscher. Munchen, 1874, pp. 319–326.

[3] For these, see *Storia delle Dottrine Finanziarie in Italia.* Dal Prof. G. Ricca-Salerno. Roma, 1881 (2d edition, 1895).

distribution in particular. Without such a general definite theory as a basis, the whole superstructure of the doctrine of incidence was necessarily both slight and unstable. It was reserved for the Physiocrats and Adam Smith to formulate for the first time a consistent theory of distribution as the very basis of the new political economy, and it is accordingly with them that the modern theories of the incidence of taxation begin. It is these modern theories that will now engage our attention.

BOOK II

THE MODERN THEORIES

CHAPTER I

The Physiocratic Theory

The Physiocratic theory of incidence was outlined by the founder of the sect, Quesnay; it was developed by Mirabeau; it was discussed from all sides by Mercier de la Rivière, by Du Pont de Nemours, and by the Abbé Baudeau; and it was finally completed by various works of Turgot. The theory may be summed up as follows: Agriculture is the sole source of wealth. It is the only productive employment because it alone furnishes a *produit net* or surplus above the necessary expenses of production. These necessary expenses the Physiocrats call the agricultural advances or outlay. They are of two kinds: first, the primitive advances (*avances primitives*), consisting of the capital applied to land in the shape of implements, beasts of burden, clearing and preparing the soil; and secondly, the annual advances (*avances annuelles*), or the capital spent on wages and on maintaining the primitive advances — that is, in keeping the land, animals and tools in good condition. The gross product is called by them the returns of agriculture (*reprises de la culture*); and after deducting from this gross product the annual advances plus the interest on the primitive advances, there remains the net produce or the surplus above the expenses of cultivation.

Agriculture alone furnishes such a surplus. All other occupations are utterly unproductive or "sterile." Industry and commerce may be useful and even necessary to a community; but they are economically unproductive. They do not create new wealth, but simply transform existing wealth. They may increase values, but the increase of value must be

exactly equivalent to the labor expended; and the value of this labor is in last resort dependent on the value of the food or the other objects furnished by the agricultural class. Since the "net product" of agriculture is therefore the sole fund or source of wealth, all taxes, however levied, must ultimately be paid from this fund. Hence it is much better to assess this fund *directly* by a land tax, than to assess it *indirectly* by any other tax. For in this way we save expense and trouble. But whether we levy direct or so-called indirect taxes, the incidence is always on the land.

Although there now exists in English an admirable sketch[1] of the general economic doctrines of the Physiocrats, the absence of any detailed account of their fiscal views, as well as the lack of any English translation of their chief works,[2] justifies a somewhat extended presentation of their doctrine of the incidence of taxation.

The fullest and the best account of the doctrine of incidence is found in the works of Quesnay.[3] This writer posits the maxim that taxes should bear some proportion to the mass of national income, and that they should be imposed directly on the net produce of land, not on wages or commodities. The outlay for agriculture should be regarded as something precious, to be preserved as a fund not only for the payment of taxes, but for the creation of the social income and for the subsistence of the citizens. Otherwise, taxation becomes mere spoliation.[4]

[1] Higgs, *The Physiocrats.* London, 1897.

[2] The only English translations are those of *The Oeconomical Table,* London, 1776, and of Turgot, *Reflections on the Formation and Distribution of Wealth,* London, 1793. A new translation of the latter appeared, with a slightly different title, in Professor Ashley's *Series of Economic Classics,* New York, 1898.

[3] The best edition of Quesnay's writings is *Œuvres Économiques et Philosophiques de F. Quesnay, Fondateur du Système Physiocratique,* avec une Introduction et des Notes par Auguste Oncken. Francfort-sur-le-Main, 1888. A less complete, but more familiar, edition is that of E. Daire, in the volume of the *Collection des principaux Économistes,* entitled *Physiocrates.* Paris, 1846.

[4] "*Que l'impôt ne soit pas destructif, ou disproportionné à la masse du revenu de la nation; que son augmentation suive l'augmentation du revenu; qu'il soit établi immédiatement sur le produit net des biens fonds,* et non sur le salaire des

Quesnay proceeds to illustrate this doctrine as follows: A well-regulated tax should be deemed a part of the income separated from the net produce of the soil; for otherwise it would be impossible to frame any rule of proportion between taxation and wealth or income. All the taxpayers might be ruined before the government would notice it. The real net produce, he continues, may be divided into three parts, belonging respectively to the state, to the landowner, and to those who collect the tithe. Only the landowner's portion is subject to sale, and its price will vary with the revenue it yields. The landowner's property extends only to this portion. He therefore does not pay the others who share in the property, for their portions do not belong to him, have never been acquired by him, and cannot be sold. The landowner then must not look upon a tax as a charge imposed upon his share. He does not pay the ordinary tax; it is the part of the property which does not belong to him, that pays the tax. It is only in extraordinary exigencies, when the very safety of the property itself is imperilled, that all the co-proprietors must, for the time being, share in the burden.[1]

hommes, ni sur les denrées, où il multiplierait les frais de perception, préjudicierait au commerce et détruirait annuellement une partie des richesses de la nation. Qu'il ne se prenne pas non plus sur les richesses des fermiers des biens-fonds; car LES AVANCES DE L'AGRICULTURE D'UN ROYAUME DOIVENT ÊTRE ENVISAGEÉS COMME UN IMMEUBLE QU'IL FAUT CONSERVER PRÉCIEUSEMENT POUR LA PRODUCTION DE L'IMPÔT, DU REVENU, ET DE LA SUBSISTANCE DE TOUTES LES CLASSES DES CITOYENS: autrement l'impôt dégénère en spoliation et cause un dépérissement qui ruine promptement un État." — *Maximes Générales du Gouvernement Économique d'un Royaume Agricole.* 1758, no. v. In Daire's *Physiocrates*, p. 83; in Oncken's *Œuvres de Quesnay*, p. 332.

[1] "L'impôt bien ordonné . . . doit être regardé comme partie du revenu detachée du produit net des bien-fonds . . . Le produit net des biens-fonds se distribue à trois propriétaires, à l'État, aux possesseurs des terres et aux décimateurs. Il n'y a que la portion du possesseur du bien qui soit aliénable, et elle ne se vend qu'à raison du revenu qu'elle produit. La propriété du possesseur ne s'étend donc pas au-delà. Ce n'est donc pas lui qui paye les autres propriétaires qui ont part au bien, puisque leurs parts ne lui appartiennent pas, qu'il ne les a pas acquises, et qu'elles ne sont pas aliénables. Le possesseur du bien ne doit donc pas regarder l'impôt ordinaire comme une charge établie sur sa portion; car ce n'est pas lui qui paye ce revenu, c'est la partie du bien qu'il n'a pas acquise, et qui ne lui appartient pas, qui le paye à qui il est dû. Et ce n'est que dans les cas

It should not be forgotten, Quesnay warns us, that taxes ought to be imposed on real income — that is, on the annual net produce of lands — and not on the wages of the farm laborer, or on the wages of the industrial laborer, or on commodities. If levied on agricultural wages, a tax would impede production, injure the land, and ruin the farmers, the landowners and the government. If levied on the wages of industrial laborers or on commodities, a tax would be arbitrary, the cost of collection would exceed the yield of the tax, and the burden would fall without any uniformity on the income of the sovereign and of the people. We must be careful, he continues, to distinguish between a tax or impost on the one hand, and an imposition on the other. Impositions would amount to triple the imposts, and would extend to the imposts themselves; for the impositions or false taxes levied on commodities would have to be paid finally by the imposts or real taxes.[1]

The so-called tax or imposition on men who live by their labor, says Quesnay, is really a tax on labor, which is necessarily paid by the employer just as a tax on the horses used on a farm is really a tax on the expenses of cultivation. Therefore a tax on men, instead of on revenue, would rest on the expenses of industry and agriculture, would fall with

de nécessité, dans les cas où la sûreté de la propriété serait exposée, que tous les propriétaires doivent pour leur propre intérêt contribuer sur leurs portions à la subvention passagère que les besoins pressants de l'État peuvent exiger." — Daire, pp. 83, 84; Oncken, pp. 337, 338.

[1] "Mais il ne faut pas oublier que dans tous les cas l'imposition du tribut ne doit porter que sur le revenu, c'est-à-dire sur le produit net annuel des biens fonds; et non sur les avances des laboureurs, ni sur les hommes de travail, ni sur la vente des marchandises, car autrement il serait déstructif. Sur les avances des labourers ce ne serait pas un impôt, mais une spoliation qui éteindrait la réproduction, détériorerait les terres, ruinerait les fermiers, les propriétaires et l'Etat. Sur le salaire des hommes de travail et sur la vente des marchandises, il serait arbitraire, les frais de perception surpasseraient l'impôt, et retomberaient sans règle sur les revenus de la nation et sur ceux du souverain. Il faut distinguer ici l'imposition d'avec l'impôt; l'imposition serait le triple de l'impôt, et s'étendrait sur l'impôt même; car, dans toutes les dépenses de l'Etat, les taxes imposées sur les marchandises seraient payées par l'impôt. Ainsi cet impôt serait trompeur et ruineux." — Daire, p. 54; Oncken, p. 338.

redoubled force on the revenue of land (since all industry rests on the land), and would rapidly lead to the destruction of real taxation itself. The same may be said of taxes on commodities.

A tax levied indiscriminately on land, on products, on men, on labor, on commodities and on beasts of burden would involve a combination of six equal taxes, superimposed the one on the other, all resting on the same base and yet paid separately — but all together yielding less revenue than a simple real tax, assessed without expense and solely on the net produce. Such a tax, suggested by the order of nature, would greatly increase the revenue of the sovereign, but would nevertheless cost the nation and the state five-sixths less than the taxes imposed on everything. The latter, moreover, would annihilate the country's production and would exclude all possibility of ultimate reform. For these taxes, illusory for the sovereign and ruinous to the nation, appear to the vulgar all the more inevitable as the decay of agriculture progresses.

Quesnay concludes, therefore, that taxes should be imposed directly on the net produce of land; for, no matter how the tax is imposed, it is always paid by the land. Hence the form of taxation which is at once the simplest, the best regulated, the most productive and the least burdensome, is that which is levied proportionally to net produce and directly on the source of the ever new-born wealth.[1]

In another work,[2] Quesnay devotes himself specifically to the problem of indirect taxation. Some indirect taxes, he tells us, are comparatively simple and economical. Such,

[1] "L'impôt doit donc être pris immédiatement sur le produit net des biens-fonds; car, de quelque manière qu'il soit imposé dans un royaume qui tire ses richesses de son territoire, il est toujours payé par les biens-fonds. Ainsi la forme d'imposition la plus simple, la plus réglée, la plus profitable a l'État, et la moins onéreuse aux contribuables, est celle qui est établie proportionnellement au produit net et immédiatement à la source des richesses continuellement renaissantes." — Daire, pp. 84, 85; Oncken, p. 339.

[2] *Second Problème Économique:* déterminer les Effets d'un Impôt Indirect. In *Physiocrates*, Daire's edition, pp. 127 *et seq.;* in *Œuvres*, Oncken's edition, pp. 697 *et seq.*

for instance, are the general property or income tax, known as the *taille personnelle*, the poll tax, the *corvée* or road tax, the tax on house rent, and the tax on funds. Others are more complex and more costly to collect. Such are the taxes on products and merchandises, import and export duties, internal tolls, taxes on transportation and communication, on sales, on offices and positions, on privileges and franchises. All these taxes together form an aggregate that may be summed up under the name of the *indirect tax;* the various expenses of collection and other surcharges, constitute another mass which may be called the *cost of the indirect tax.*[1]

Quesnay proceeds to call attention to the evil results of all these indirect taxes. Following the detailed figures of his celebrated *Economic Table*,[2] he calculates the actual losses to the community. If, for instance, instead of a direct tax of 800 millions, only 300 millions were raised by a land tax, and 500 millions by indirect taxes, Quesnay figures out that the landowners would have to pay 235 millions more, that the government would lose 379 millions, and that wages would fall by a sum of 318 millions, making a

[1] "Il y a des impôts indirects, simples et peu dispendieux dans leur perception. Tels sont ceux qui s'établiraient sur les hommes en forme de taille personelle, de capitation, de corvées, de taxes sur les loyers de maisons, sur les rentes pécuniaires, etc. D'autres sont fort composés, et entrainent une perception fort dispendieuse. Tels sont ceux qui seraient établis sur les denrées et marchandises, aux entrées, aux sorties, aux péages, aux douanes, ou sur les navigations et charrois du commerce intérieur et extérieur, ou sur la circulation de l'argent dans les achats et dans les ventes de toute espèce; telles sont aussi les créations de charges et d'offices, avec attribution perpétuelle ou à terme de droits et taxes, au profit de ceux qui en seraient revêtus, les privilèges de commerce exclusif, etc. . . . Mais la réunion de ces divers impôts indirects, plus au moins onéreux, formant une masse totale que l'on peut en général appeler *l'impôt indirect*, la réunion des frais de perception et des autres surcharges que tous ces divers impôts entrainent à leur suite, présente une autre masse que l'on peut appeler aussi en général les *frais de l'impôt indirect*, et dont la quotité, considérée relativement à la somme que le souverain retire de la totalité des impôts indirects, établit le taux moyen des frais de perception des impôts de ce genre." — Daire, p. 127; Oncken, pp. 697, 698.

[2] *Le Tableau Économique.* This was reprinted by the British Economic Association in 1894.

total loss to the community of 932 millions. In addition to this immense money loss, the other resulting evils may be summed up under four heads. First in order comes the rapid deterioration of the land, due partly to the decrease in agricultural capital, partly to the fear of employing new machines or adopting new processes which would be subject to indirect taxes, partly to the ravages made in the substance of the cultivators themselves. Secondly, we notice the immense fortunes of the tax-collectors, which impede the circulation of money and its return to agriculture. Thirdly, is to be mentioned the residence of the rich financiers in the capital, which tends to separate consumption from the place of production. And, fourthly, we must not forget the multiplication of beggars, which is to be directly ascribed to indirect taxation; for indirect taxes, by annihilating a part of the annual reproduction of wealth, destroy wages and the means of subsistence. The increase of beggary, again, in last resort means an additional burden on the landowners; for they dare not refuse alms.[1]

Quesnay is severe on the landowners for not recognizing the wisdom of the single tax. The tax seems to them excessive. Their ignorant cupidity has never allowed them to see that taxes can really be imposed only on the revenue of the land. They have always thought that taxes ought to be levied on men or on the things consumed by men, because all men share in the benefits of the protection of government. They have never reflected that man, whose physical constitution depends on the satisfaction of his wants, can do nothing by himself; and that all taxes imposed on men, or on the things they consume, are necessarily taken from the wealth on which men live and which the land alone produces.[2]

[1] Daire, pp. 139, 140; Oncken, pp. 716, 717.

[2] "Mais ce revenu public de 800 millions, qui embrasse directement les *deux septièmes* du produit net du territoire, aurait paru excessif aux propriétaires fonciers. Leur cupidité ignorante ne leur a jamais laissé apercevoir que l'impôt ne doit être pris que sur le revenu des terres. Ils ont toujours pensé que l'impôt devait être établi sur les hommes ou sur les consommations que font les hommes, parce que les hommes participent tous à la protection de la puissance souveraine.

As a result of his whole discussion, Quesnay concludes that no matter how it is arranged, the productive class, the landowners and the tax itself—as the first distributors of the total expenses—inevitably pay the whole of the indirect taxes levied on the men they employ, or on the goods and commodities they consume; and each one contributes to the tax in proportion to his share of the expenses.[1]

Quesnay's theories were soon adopted by a number of enthusiastic followers. The Marquis of Mirabeau devoted a special book to the subject of taxation, laying down the general principle that "taxes should be levied directly on the annual reproduction," or "on the source of all revenue."[2] In another place he points out that no matter how the tax is imposed, it must be paid from the net product; and unless it is assessed directly on this product we are without base or compass.[3] A few years later another writer, Saint Péravy, devoted a separate work to the study of indirect taxes, from the same point of view.[4]

Mercier de la Rivière, perhaps the clearest thinker of the Physiocrats, took especial pains in making this distinction

Ils n'ont nullement songé que l'homme, dont la constitution physique ne présente que des besoins, ne peut rien par lui-même; et que toute imposition mise sur les hommes, ou sur leur consommation, serait nécessairement prise sur les richesses qui font subsister les hommes, et que la terre seule produit." — Daire, p. 131; Oncken, p. 704.

[1] "Ainsi, de quelque façon qu'on s'arrange, la classe productive, les propriétaires des terres, et l'impôt même, comme premiers distributeurs des dépenses payent inévitablement la totalité de l'imposition indirecte que l'on établit sur les hommes qu'ils salarient, ou sur les denrées et marchandises qu'ils consomment; et ils y contribuent chacun à raison de la distribution de ses dépenses." — Daire, p. 134; Oncken, p. 707.

[2] "L'Impôt doit être établi immédiatement sur la réproduction annuelle." — *Théorie de l'Impôt.* [Par Le Marquis de Mirabeau.] 1760, p. 123. "Que l'impôt soit établi immédiatement à la source des revenus." — *Ibid.*, p. 131. In the more common octavo edition of 1761 these passages are found on pp. 150 and 160.

[3] "De quelque manière que se retourne l'impôt il est impossible qu'il provienne d'autre part que du produit; s'il n'est pris directement sur le produit net qui constitue le revenu, il n'a plus ni base, ni boussole." — *L'Ami des Hommes, ou Traité de la Population*, 1757, tome vii, p. 45. *Cf.* pp, 47, 171.

[4] *Mémoire sur les Effêts de l'Impôt Indirect.* Par Saint Péravy. 1768.

between direct and indirect taxes hinge on the question of incidence. The essential form of taxation, he tells us, consists in taking the tax directly where it is, and in not trying to take it where it is not. It is clear that the funds destined to the payment of taxes are to be found only in the hands of the landowners, or rather of the farmers. They receive these funds from the land, and when they give them up to the king, they are not really giving anything that belongs to them. On them, therefore, we must lay the tax, if we wish to burden nobody. To change this direct form of taxation, and to give it an indirect form, is to reverse the natural order, from which we cannot deviate without the greatest evils. Taxation is indirect, when it is levied on persons or on commodities. In both cases the damage to the king and to the people alike is enormous and inevitable.[1]

The evils above referred to, he tells us in another passage, are inherent in the very nature of indirect taxes. The name itself tells us that the tax is not borne by those on whom it seems to be directly laid; and that is perfectly true. Even when it appears to have nothing to do with the landowners, it falls on them — and with considerable additions; for it always costs them more than the king receives. In certain cases it even causes them to suffer losses which redound to

[1] "Ainsi la forme essentielle de l'impôt consiste à prendre *directement* l'impôt où il est, et a ne pas vouloir le prendre où il n'est pas. . . . Il est évident que les fonds qui appartiennent à l'impôt ne peuvent se trouver que dans les mains des propriétaires fonciers, ou plutôt des cultivateurs ou fermiers qui, à cet égard, les représentent; ceux-ci reçoivent ces fonds de la terre même et, lorsqu'ils les rendent au souverain, ils ne donnent rien de ce qui leur appartient; c'est donc à eux qu'il faut demander l'impôt, pour qu'il ne soit à la charge de personne. Changer cette forme *directe* de l'établissement de l'impôt pour lui donner une forme *indirecte*, c'est renverser un ordre naturel dont on ne peut s'écarter sans les plus grands inconvénients.

"La forme de l'impôt est *indirecte* lorsqu'il est établi ou sur les personnes mêmes ou sur les choses commerçables: dans l'un et l'autre cas, les préjudices qu'il cause au souverain et à la nation sont énormes et inévitables, et ils sont à-peu-près les mêmes, quoiqu'ils ayent une marche et une gradation différentes." — *L'Ordre Naturel et Essentiel des Sociétés Politiques.* [Par Mercier de la Rivière.] Londres, 1767, chap. xxx, p. 243. In Daire, *Physiocrates*, it is reprinted as chapter iv, p. 474.

no one's advantage, and it thus brings about a progressive decrease in the total quantity of wealth.[1]

Therefore, he concludes, in the essential order of society (to outline which his whole book is written) taxation is entirely independent. The revenue it yields is the necessary result of a combination of causes which always remain the same and always produce the same effects. But this valuable advantage can be retained only so far as its essential form is not changed, and as the king directly seizes the portion that his co-ownership in the lands of his dominion gives him a right to take.[2]

The great popularizer of the Physiocratic doctrines, Du Pont de Nemours, who subsequently tried to impress his ideas of incidence on the French revolutionary parliament, put the theory in a little different way.[3] Taxes, he tells us, cannot be imposed indifferently on all kinds of wealth. Nature has not given to that form of wealth which is used in agricultural production the power of making any contribution to taxes. She has, in fact, imperiously subjected it to the law of being wholly consumed in keeping up the cultivation of the land itself, on pain of seeing cultivation, the crops, the people, the empire itself gradually disappear. That portion

[1] "Les inconvénients dont je veux parler sont dans la nature même de l'impôt *indirect*. Le nom qu'on lui donne ici annonce qu'il n'est point supporté par ceux sur lesquels il semble être *directement* établi, et cela est vrai : lors même qu'il paroît totalement étranger aux propriétaires fonciers, il retombe sur eux, et à grands frais, car il leur coûte toujours beaucoup plus qu'il ne rend au Souverain; il leur occasionne même, en certains cas, des pertes sèches dont personne ne profite, des diminutions progressives de la masse commune des richesses disponibles, dans lesquelles le Souverain doit partager, et qui sont la mesure de sa puissance politique." — *L'Ordre Naturel et Essentiel des Sociétés Politiques*, p. 247. In Daire's ed., p. 476.

[2] "Ainsi, dans l'ordre essentiel des sociétés, l'impôt est totalement indépendant; le produit qu'il donne annuellement est le fruit nécessaire d'un enchaînement de diverses causes qui seront toujours les mêmes, et qui produiront toujours les mêmes effets. Mais il ne peut conserver cet avantage précieux qu'autant qu'on ne change point sa forme essentielle, que le souverain prend directement la part proportionnelle que sa copropriété lui donne droit de prendre dans les produits nets des terres de sa domination." — *Ibid.*, p. 249. In Daire's ed., p. 478.

[3] In his *De l'Origine et des Progrès d'une Science Nouvelle.* [Par P. S. Du Pont du Nemours.] Londres, 1768. In Daire's *Physiocrates*, p. 335.

of the crops which is called the net produce is, then, the only part naturally subject to taxation.[1]

The aim of taxation, Du Pont tells us in another place, is the preservation of the rights of property and of liberty in their original and natural extent. All kinds of taxes which curtail liberty and property, and which therefore necessarily diminish wealth and population, would thus be clearly contrary to the aim of taxation. If duties were levied on persons, on commodities, on expense, or on consumption, their collection would be costly, their existence would impede the liberty of human effort, and they would necessarily increase the expenses of commerce and agriculture.[2]

Coming, then, more specifically to the problem of shifting, Du Pont contends that when an indirect route is taken in the assessment of a tax, it is none the less paid, in last analysis, by the net produce of land. But it is then extremely disastrous and much more burdensome to the landowners. It curtails liberty and restrains property; it lowers the price of produce in the hands of the producer; it decreases the mass of products, and still more the sum of national revenues; it leads to misery and depopulation; it ruins by degrees the

[1] "L'impôt ne saurait même porter indifféremment sur toutes les richesses renaissantes. La nature a refusé à celles qu'on appelle *reprises des cultivateurs* la faculté de contribuer à l'impôt, puisqu'elle leur a impérieusement imposé la loi d'être employées en entier à entretenir et à perpétuer la culture, sous peine de voir anéantir par degrés la culture, les récoltes, la population, les empires.

"La portion des récoltes nommée le *produit net*, est donc la seule contribuable à l'impôt, la seule que la nature ait rendue propre à y subvenir.

"Il est donc de l'*essence* de l'impôt d'être une portion du *produit net* de la culture." — *Ibid.*, p. 351.

[2] "Le but de l'impôt est la conservation du droit de propriété et de la liberté de l'homme dans toute leur étendue naturelle et primitive ; conservation qui peut seule assurer la multiplication des richesses et de la population.

"Toute forme d'imposition qui restreindrait la propriété et la liberté de l'homme, et qui diminuerait nécessairement les richesses et la population, serait donc manifestement opposée au but de l'impôt.

"Si l'on établissait des impositions sur les personnes, sur les marchandises, sur les dépenses, sur les consommations, la perception de ces impositions serait fort coûteuse ; leur existence gênerait la liberté des travaux humains, et augmenterait nécessairement les frais de commerce et de culture." — *Ibid.*, pp. 351, 352.

soil, the farmers, the landowners, the nation and the king.[1] It is no wonder that, holding such views, the Physiocrats summed up their theory of taxation in the famous phrase: Indirect taxes, poor peasants; poor peasants, poor kingdom; poor kingdom, poor king.[2]

The Abbé Baudeau develops the same line of thought. Instead of the net produce, he speaks of "the clear and liquid annual revenue of land," which he thinks is so simple an idea that it is self-evident.[3] Baudeau emphasizes the fact already alluded to by Quesnay, and subsequently worked out more lucidly by Turgot — namely, that a part of this "clear revenue" must really be regarded as belonging not to the owner but to the king; and that therefore, when a man buys a piece of land, he buys not the whole of its revenue, but only that part which is not due to government. The payment due to the king by virtue of his right of sovereignty is, therefore, not really a tax at all; it is not, as many people say of taxation in general, a sacrifice which each citizen makes of a part of his property in order to keep the rest.[4]

[1] "Nous venons de voir que lorsqu'on veut prendre une route indirecte pour lever l'impôt, il n'en est pas moins payé, en dernière analyse, par le *produit net* des biens-fonds; mais qu'il l'est alors d'une manière extrêmement désastreuse et beaucoup plus onéreuse pour les propriétaires fonciers; qu'il gêne la liberté et restreint la propriété des citoyens; qu'il fait baisser le prix des productions, à la vente de la première main; qu'il diminue la masse des produits, et encore plus la somme des revenus du territoire; qu'il amène la misère et la dépopulation; qu'il ruine par degrés la culture, les cultivateurs, les propriétaires fonciers, la nation et le souverain." — *De l'Origine et des Progrès d'une Science Nouvelle*, p. 354.

[2] "Impositions indirectes; pauvres paysans. Pauvres paysans; pauvre royaume. Pauvre royaume; pauvre roi." — *Ibid.*, p. 354.

[3] "Vouloir connaître le revenu clair et liquide annuel de chaque terre par estimation commune de son état habituel, c'est donc chercher une chose toute trouvée." — *Première Introduction à la Philosophie Économique, ou Analyse des États Policés.* [Par Nicolas Baudeau.] 1771. In Daire's *Physiocrates*, p. 767. Similar ideas may be found in Baudeau's earlier work, *Lettres d'un Citoyen à un Magistrat sur les Vingtièmes et les autres Impôts.* 1768.

[4] "Tout propriétaire saurait qu'il n'acquiert pour ses héritiers, pour ses cessionnaires ou ayant-cause, que quatorze vingtièmes, ou un peu plus de deux tiers, du produit net annuel d'un fonds mis en exploitation; que le reste n'est pas à lui, mais à la souveraineté.

"Il sait que le droit de la souveraineté, sur un peu moins du tiers des revenus

The specific question of the incidence of export and import duties, as well as of taxes on communication and transportation in general, was treated at considerable length by another of the Physiocrats, Le Trosne. Most of what he says deserves careful attention even to-day, especially when he discusses the conditions under which a part of the export or import duties is supposed to rest finally on the foreign country.[1] But these are points of detail, the consideration of which would lead us too far astray in this place.

The most cautious as well as the greatest of the Physiocrats was Turgot. In discussing the question of the real incidence of the land tax, Turgot expounds very clearly what came to be known subsequently as the capitalization theory. If land alone were subject to taxation, says he, once the tax was settled, the capitalist purchaser would not count in the interest of his money the part devoted to the payment of the tax — just as a man who to-day buys a piece of land does not buy the tithe which the priest receives or the land tax, but buys only the income which remains after deducting the tithe and the tax.[2]

territoriaux clairs et liquides, est fondé, comme tout droit juste et raisonnable, sur des avances faites, sur des travaux accomplis ci-devant, et encore sur les mêmes avances, les mêmes travaux à continuer; sur leur efficacité, productive de ces mêmes revenus, dont ils sont une cause efficiente, une des conditions indispensables sans lesquelles il n'existerait point un tel produit net.

"Cette perception, ainsi réglée, n'a donc point les caractères de ce qu'on appelle impôt; ce n'est point, comme on le dit avec quelque apparence de raison dans les États mal administrés, un sacrifice que chacun fait, d'une portion de sa propriété, pour conserver le reste." — Daire's *Physiocrates*, pp. 762, 763.

[1] *De l'Interêt Social, par rapport à la Valeur, à la Circulation, à l'Industrie et au Commerce Intérieur et Extérieur.* Par Guillaume-François Le Trosne. 1777. In Daire's *Physiocrates*, esp. pp. 988–1007.

[2] "Je reponds, en second lieu que, si les terres étaient chargées seules de la contribution aux dépenses publiques, dès qu'une fois cette contribution serait réglée, le capitaliste qui les achèterait ne compterait pas dans l'intérêt de son argent la partie du revenu affectée à cette contribution ; de même qu'on homme qui achète aujourd'hui une terre n'achète pas la dîme que reçoit le curé, ni même l'impôt connu, mais le revenu qui reste, déduction faite de cette dîme et cet impôt." — *Réflexions sur la Formation et la Distribution des Richesses*, § 97. *Cf.* his *Comparaison de l'Impôt direct et de l'Impôt indirect*, in *Œuvres de Turgot*, edited by Daire. Paris, 1844, i, p. 413.

In an early memoir, written in 1764, Turgot maintains that all taxes must be paid out of income. He then proceeds to a discussion of income in general, in the course of which he elaborates the doctrine of the *produit net* which alone constitutes the real social revenue, disposable for purposes of taxation. The landowner, says he, is the only one who has a real income:[1] every other conception of income is illusory.[2] It follows, therefore, that all taxes, howsoever levied, are ultimately paid from this income.

This leads Turgot to distinguish between direct and indirect taxes. In a later memoir, he gives a formal definition of these terms. The tax which the landowner pays immediately out of his income, he tells us, is called a direct tax; the tax which is not directly assessed on the income is called an indirect tax. Indirect taxes may be reduced to three chief classes: the tax on the tenant farmer, the tax on the profits of capital or industry, and the tax on commodities sold or consumed. The landowner, however, bears the burden of the indirect tax in two ways: through an increase of his expenses, and through a decrease of his income.[3] The term

[1] "Le propriétaire de fonds est le seul qui ait un véritable revenu." — *Plan d'un Mémoire sur les Impositions en Général*, etc., in *Œuvres de Turgot*, i, p. 400.

[2] "Tout autre idée de revenu est illusoire. Lorsqu'on achète un bien-fonds, c'est ce revenu seul qu'on achète." — *Ibid.*, p. 402.

[3] "L'impôt que le propriétaire paye immédiatement sur son revenu est appelé *impôt direct*. L'impôt qui n'est point assis directement sur le revenu du propriétaire, mais qui porte ou sur les frais productifs du revenu, ou sur les dépenses de ce revenu, est appelé *impôt indirect*.

"L'impôt indirect, malgré la variété des formes dont il est susceptible, peut se réduire à trois classes:

"L'impôt sur les cultivateurs; — l'impôt sur les profits de l'argent ou de l'industrie; — l'impôt sur les marchandises passantes, vendues ou consommées.

"Ces trois classes, et les différentes formes d'impositions dans lesquelles elles se subdivisent, peuvent retomber sur les propriétaires par un circuit plus ou moins long, et d'une manière plus ou moins onéreuse.

"Les propriétaires payent l'impôt indirect de deux façons, en augmentation de dépense et en diminution de revenu." — *Explications sur le Sujet du Prix offert par la Société Royale de l'Agriculture de Limoges au Mémoire dans lequel on aurait le mieux demontré l'Effêt de l'Impôt Indirect sur le Revenu des Propriétaires de Bien-Fonds;* in *Œuvres de Turgot*, i, pp. 416, 417.

"indirect tax," therefore, covers every tax except a direct tax on the net revenue of land.[1]

In another place, Turgot tries to meet the objection of those who maintained that wealth in general is the source of taxation. It is not all real wealth, he tells us, that can pay taxes. To serve this purpose, wealth must be *disposable*, — that is, it must not be needed for the reproduction of the following year, directly or indirectly. All wealth may indeed be taken by main force; but no wealth necessary to the work of reproduction can be diverted from this end without injury to the national wealth, and consequently to the power of the government. In the recognition of this principle consists the whole theory of taxation.[2]

Finally, in a memoir said to have been written for Benjamin Franklin, Turgot develops more fully his theories of the shifting of all indirect taxes to the landowner.[3] Yet, notwithstanding his theories, Turgot, while at the head of the treasury, made no attempt, as is sometimes asserted, to put the plan of the single tax into actual operation. He was too great a statesman to commit himself to any such hazardous scheme.

The Physiocrats, it may be remarked in passing, exercised a perceptible influence on contemporary American thought. In

[1] Elsewhere, however, Turgot also classes a poll tax as a direct tax. But if the poll tax be graded so as to reach the "faculties, industry, profits or wages," it must be called an indirect tax. — *Ibid.*, i, p. 396.

[2] "Ce n'est pas toute richesse réelle, comme le croit l'auteur, qui peut payer l'impôt; il faut encore qu'elle soit *disponible*, c'est-à-dire qu'elle ne soit pas nécessaire à la réproduction de l'année suivante, soit immédiatement, soit médiatement. Toute richesse nécessaire aux travaux de la réproduction n'en peut être détournée sans nuire à cette reproduction, à la richesse nationale, et par suite aux moyens de puissance du gouvernement. Voilà toute la théorie de l'impôt." In *Observations sur le Mémoire de M. Graslin en faveur de l'Impôt Indirect.* — *Œuvres*, i, pp. 434, 435.

[3] *Comparaison de l'Impôt sur le Revenu des Propriétaires et l'Impôt sur les Consommations.* — *Œuvres*, ii, p. 409. Du Pont de Nemours says that this was written to dissuade Hamilton, then Secretary of the Treasury, from adopting his scheme of indirect taxes. But as Turgot had been dead several years before Hamilton formulated his scheme, this is clearly impossible. Yet the statement that the memoir was originally written for Franklin may be true.

a number of the writings of the foremost American statesmen there are continual references to the doctrines of the "Economists." Benjamin Franklin, for instance, carried on an extended correspondence with the Abbé Morellet and with Le Veillard. In one of his later letters, he refers to the doctrine as among the principles of economics which he originally shared; but his great practical sense convinced him of the futility of the attempt to apply the scheme in America.[1] Alexander Hamilton also seems, in one of the essays in the *Continentalist*, to have shared the opinions of the Physiocrats.[2] A careful reading of the context, however, shows that Hamilton did not advocate any scheme for a single tax on land. In fact, he adds in another place that "particular caution ought at present to be observed in this country, not to burden the soil itself and its productions with heavy impositions."

An eminent French writer, M. Leroy-Beaulieu, has fallen into a curious error. The Physiocrats, according to him, held that, even if the single tax were imposed, the landowners would lose nothing because their products would rise in price and would thus reimburse the proprietors for their original outlay.[3] This, however, is a mistake. The cardinal doctrine of the Physiocrats was that all taxes fall ultimately on the

[1] "I have not lost any of the principles of public economy you once knew me possessed of. . . . Our legislators are all landowners, and they are not yet persuaded that all taxes are paid by the land." — *Letter to Mr. Small*, 1787. In *The Complete Works of Benjamin Franklin*, edited by John Bigelow. New York, 1887, ix, p. 414.

[2] "Many theorists in Political Economy have held, that all taxes, wherever they originate, fall upon land, and have therefore been of the opinion that it would be best to draw the whole revenue of the state immediately from that source. . . . But though it has been demonstrated that this theory has been carried to an extreme, impracticable in fact, yet it is evident, in tracing the matter, that a large part of all taxes, however remotely laid, will, by an insensible circulation, come at last to settle upon land — the source of most of the materials employed in commerce." — *The Continentalist*, vi, 1782. In *The Works of Alexander Hamilton*, edited by Henry Cabot Lodge. New York, 1885, i, p. 266.

[3] *Science des Finances*. Par Paul Leroy-Beaulieu. Paris, 1892, 5th ed., i, p. 199. The mistake is repeated in the 7th ed., 1906, i, p. 275.

landowners, and on them alone.[1] It was just because the Physiocrats supposed that the tax could not be shifted that they advocated the single tax. The landowners would, indeed, in their opinion, suffer less from a direct tax than from an indirect tax; for not only would the indirect taxes yield so little, relatively, that higher rates would be necessary, but they would tend to destroy the foundations on which the prosperity of the landowners rested. But the direct tax, even though less destructive, would still remain on those on whom it was originally imposed — the owners of the soil.

The Physiocratic doctrine of incidence does not need any formal refutation. Resting on the peculiar doctrine of the sole productivity of agriculture, it has been convicted of exaggeration and unreality.[2] The Physiocrats' theory of distribution and their conception of natural law may be said to have ushered in the modern period of economic science. But Adam Smith, who was in these respects so profoundly influenced by the Physiocrats, shattered the very foundations on which their third fundamental doctrine — that of the *produit net* — was based. If the Physiocrats developed what

[1] "Tout impôt est payé par le produit des terres, tout ce que l'impôt prend sur ce produit, après les partage fait par le souverain, forme un double emploi; tout double emploi retombe sur les propriétaires fonciers." — *L'Ordre Naturel*, etc. Par Mercier de la Rivière, chap. vii (p. 504 of Daire's ed.). "Tous les impôts sous quelque forme qu'ils soient perçus retombent nécessairement à la charge des propriétaires des biens fonds, et sont toujours en dernière analyse payés par eux seuls, ou directement, ou indirectement." — *Explications sur l'effêt de l'Impôt Indirect*, in *Œuvres de Turgot* (Daire's ed.) i, 416.

[2] A good exposition of its weakness is made by Arthur Young in his *Political Arithmetic*, 1774, pp. 208–266. The best contemporary French refutation is contained in *Essai Analytique sur la Richesse et sur l'Impôt, où l'on refute la nouvelle doctrine économique . . . sur l'effet des Impôts indirects*. Par Louis François de Graslin. Londres, 1767. Graslin not only denies that the so-called indirect taxes are shifted to land, but contends that a tax imposed directly on land is sometimes shifted to the consumer. — *Ibid.*, pp. 230 *et al.* Another work very widely read at the time was the anonymous volume written to answer Mirabeau's book on taxation, under the title *Doutes proposés à l'Auteur de la Théorie de l'Impôt*. 1761. See especially pp. 24–48, "Sur quoi doit-on préférablement faire porter les impositions?"

might be called the agricultural system of economics, Adam Smith is responsible for the industrial system. Yet their theories of the incidence of taxation, apart from the peculiar doctrine of the *produit net*, are not so dissimilar as might be imagined.[1]

[1] A refutation not only of the Physiocratic doctrine of incidence, but of that of Smith and Ricardo, is attempted at great length in *On Taxes or Public Revenue, the Ultimate Incidence of their Payment, their Disbursement, and the Seats of their Ultimate Consumption.* By an Officer in the Military and Civil Service of the Hon. East India Company. London, 1829. The chapter devoted to the Physiocrats is more successful than that dealing with the English writers.

The Physiocratic doctrines were reproduced in England not only by Spence but by two anonymous pamphleteers. William Spence, the author of *Britain Independent of Commerce*, 1808, and *Agriculture the Source of the Wealth of Britain*, 1808, is discussed by H. Higgs in *The Physiocrats*, 1897, pp. 137–139. The anonymous pamphlets *The Essential Principles of the Wealth of Nations illustrated, in Opposition to some False Doctrines of Dr. Adam Smith and Others*, 1797, and *Sketches on Political Economy Illustrative of the Interests of Great Britain; intended as a Reply to Mr. Mill's Pamphlet Commerce Defended, with an Exposition of some of the Leading Tenets of the Economists* are discussed in Seligman, "On Some Neglected British Economists" in *The Economic Journal*, xiii (1903), pp. 4–7. The best known opponents of the Physiocrats in England were James Mill in *Commerce Defended*, 1808, and Robert Torrens in *The Economists Refuted*, 1808. But the writer who devoted especial attention to their doctrine of incidence was Daniel Wakefield in *An Essay upon Political Oeconomy, being an Inquiry into the Truth of the Two Positions of the French Oeconomists; that Labour employed in Manufactures is Unproductive; and that all Taxes ultimately fall upon, or settle in the Surplus Produce of Land*, 1799. Wakefield's own conclusion is that "taxes settle and terminate, if direct, on any species of monopoly income, whether arising from land, capital, stock or labour, in such income, and if indirect, on commodities in the way of customs or excise, upon the consumers of such commodities." — *Op. cit.*, 2d ed., 1804, pp. 82–83.

CHAPTER II

The Absolute Theory

On the subject of the incidence of taxation, as on almost every topic of economic inquiry, modern views are commonly traced back to the works of Adam Smith and Ricardo. For reasons that will soon appear, the doctrines advanced by these great thinkers may be summed up under the name of the absolute theory of incidence.

Adam Smith bases his investigation on the division of all revenue into rent, profits and wages. All taxes on land, says he, whether proportional to the rent or to the whole produce, are in reality taxes on rent. Although they may be originally advanced by the tenant, they are finally paid by the landlord. A tax on land rent necessarily falls on the owner; for the "farmer computes, as well as he can, what the value of the (tax) is, one year with another, likely to amount to, and he makes a proportionable abatement in the rent which he agrees to pay to the landlord." The farmer must have his reasonable profit as well as every other dealer. Hence "the more he is obliged to pay in the way of tax, the less he can afford to pay in the way of rent."[1] The case of a tax on house rent is slightly different, because house rent is really distinguishable into two separate ingredients — building rent and ground rent. The tax on ground rent, like that on the rent of land, will inevitably fall on the owner, because "the more the inhabitant was obliged to pay for the tax, the less he would incline to pay for the ground."[2]

[1] *An Inquiry into the Nature and Causes of the Wealth of Nations.* By Adam Smith, LL.D. London, 1776, book v, chap. ii. Vol. ii, pp. 417, 428. The quotations are from the edition of James E. Thorold Rogers, 2d ed., Oxford, 1880.

[2] *Ibid.*, ii, pp. 437, 440.

But that part of the rent which represents the building rent is simply the profits of the capital expended in building the house. This part of the tax will necessarily fall on the occupier; because, unless the builder secures the same return on his capital as other business men do, he will cease building houses until the increased demand for houses again raises the rent — that is, in this case, his profits — to the general level. A tax on house rent will therefore fall partly on the owner and partly on the occupier, but "in what proportion this final payment would be divided between them, it is not perhaps very easy to ascertain." [1]

Taxes on profits are simple of analysis. The profit arising from stock is divided by Adam Smith into two parts, that which pays the interest, and the surplus over and above the interest. A tax on the surplus above interest is always shifted, for this surplus is the "compensation for the risk and trouble of employing the stock" which the employer must have if he desires to continue the employment. It will be shifted either to the landowner or to the consumer, according as the stock is employed in farming or in mercantile business.[2] For if he employed it as "farming stock," he could raise the rate of his profit only by reducing the amount he is called upon to pay to the landlord, — that is, the rent. But if he employed it as a "mercantile or manufacturing stock," he could raise the rate of profit only by raising the price of his goods.

A tax on interest — that is, on what Smith regards as "the net produce which remains after completely compensating the whole risk and trouble of employing the stock" — seems to fall entirely on the owner, just as in the case of a tax on rent. But in reality the interest on money is a much less proper subject of direct taxation than rent, because land is tangible and easily ascertainable, while capital is not; and because land cannot be removed, while stock easily may be. To tax stock, therefore, would cause its removal from the

[1] *An Inquiry into the Nature and Causes of the Wealth of Nations*, ii, p. 434.
[2] *Ibid.*, ii, p. 441.

country, and put an end to all the industry which it had maintained. This would reduce not only the profits of stock, but also the rent of land and the wages of labor. A general tax on profits, therefore, affects other classes besides the employer.[1] A tax on the profits of stock employed in any particular branch of trade will, however, be shifted from the dealers to the consumers because the dealers must "in all ordinary cases have their reasonable profit." The consumers will have to pay, in the enhanced price of their goods, not only the tax advanced by the dealer, but generally some overcharge in addition.[2]

Taxes on wages, finally, are always shifted. This is due to the fact that the rate of wages is regulated by the demand for labor and by the average price of food. When these remain the same, a direct tax on wages "can have no other effect than to raise them somewhat higher than the tax." If the laborers were engaged in "manufacturing labor," the employer would have to raise wages, but would ultimately be obliged to charge the increase with a profit on the consumers. If the laborers were engaged in husbandry, the farmer would in the long run pay less rent to the landlord. But both the reduction of the rent and the rise of price will be greater than the amount of the tax.[3] Whenever taxes on labor have not produced a proportionate rise in wages, it is because they have led to a fall in the demand for labor. The only results of this, however, have been a "declension of industry, a decrease of employment, and a diminution of the annual produce of the land and labor of the country." Even then, wages must always be higher than they would otherwise have been, and this increase of price must be finally paid by the consumers. The same argument holds good of the "recompense of ingenious artists and of men of liberal professions"; but it does not apply so completely to "the emoluments of

[1] "The proprietor of stock is properly a citizen of the world and is not necessarily attached to any particular country." — *Ibid.*, ii, p. 443.

[2] *Ibid.*, ii, p. 446.

[3] *Ibid.*, ii, p. 461.

offices," because these are not regulated by the free competition of the market.

Finally, Adam Smith discusses taxes which are intended to "fall indifferently on every species of revenue." These are capitation taxes and taxes on consumable commodities. Capitation taxes, so far as they are levied on the lower classes, are taxes on wages, and subject to the same objections as those taxes, — that is, they are shifted to the consumers.[1] Taxes on commodities are levied either on necessaries or on luxuries. Taxes on necessaries raise the rate of wages (because wages are fixed partly by the price of necessaries) and fall on the consumers or landlords. They act precisely like taxes on labor. Taxes on luxuries, on the other hand, will not raise wages, but will fall only on the consumers of the particular commodities. So far as the poor are concerned, they act simply as sumptuary laws. It is, therefore, always to the interest of the richer classes to oppose taxes on necessaries; for all taxes on necessaries are ultimately paid by them, while taxes on luxuries fall on them only to the extent that they are consumers of luxuries.[2]

If we sum up Adam Smith's doctrine of incidence, we see that taxes on wages, taxes on profits (except the tax on interest), and taxes on necessaries are always shifted. On the other hand, taxes on land and taxes on luxuries always stay where they are put. The classes of society who bear all the taxes are thus primarily the landowners, the rich consumers and, to a certain extent, the lenders of capital.

Adam Smith's exposition, marked as it is by many profound and suggestive ideas, is entirely dependent upon his theories of rent, profits and wages. As soon as we question the validity of his theory of rent, of his treatment of wages as based on the necessaries of life, or of his conception of ordinary profits, a large part of his doctrine of incidence falls to the ground. Modern economic theory no longer accepts these bases of his theory. Ricardo himself did much to over-

[1] *An Inquiry into the Nature and Causes of the Wealth of Nations*, ii, p. 466.
[2] *Ibid.*, ii, p. 470.

throw them. But so far as Adam Smith based his doctrine of incidence on the theory of free competition without any qualifications, and on the inevitable action of simple economic causes, he may be termed in a certain sense the forerunner of the absolute theory of incidence.

Ricardo's *Principles of Political Economy and Taxation* is largely devoted to the latter subject. With his accustomed penetration, Ricardo went at once to the core of tax problems, so that his work consists almost exclusively of an investigation of the problem of incidence. His discussion of this topic discloses the same merits and the same defects which are so characteristic of his other work. On the one hand, profound and acute analysis, marvellous power of isolating the phenomena and treating them as unaffected by disturbing causes; on the other hand, the implication that the hypothetical case is the real one, the inference that the formulæ deduced with mathematical accuracy and logical rigor from the assumed premises represent the actual economic facts; — these characteristics constitute at once the strength and the weakness of the Ricardian theories.

Ricardo, like Adam Smith, does not give any general theory of incidence. In both cases we must seek for the general principles of the authors in the discussions of separate taxes. Ricardo differs from Adam Smith in his theory of rent and in his doctrine of the relation of profits to wages. Ricardo's theory of economic rent leads him to controvert Adam Smith's doctrine of the ultimate incidence of land taxes on the landowner. A tax on rent, it is true, says Ricardo, will fall wholly on the landlord; for since rent is the surplus above the cost of production, the value of the product cannot possibly be affected by the tax.[1] But it is different with taxes on produce, tithes or land taxes: these will be shifted by the landowners to the consumers. Since price is fixed by the

[1] "A tax on rent would affect rent only; it would fall wholly on landlords, and could not be shifted to any class of consumers." — *On the Principles of Political Economy and Taxation.* By David Ricardo, Esq. London, 1817, chap. viii*, p. 221. In McCulloch's edition, 1876, this is found in chap. x, p. 102.

cost of production on land of the poorest quality, runs his argument, whatever increases cost raises price. But a tax which is imposed on all cultivators necessarily increases the cost of production. Hence, a tax on produce raises price and is shifted to the consumers. A rise in price is the only means by which the cultivator can pay the tax and continue to derive "the usual and general profits" from the employment of his capital. He cannot deduct the tax from his rent, for there is no rent on the land which fixes price. He will not deduct it from his profits, because there is no reason why he should stay in an employment with smaller profits. He can, therefore, pay the tax only by increasing the price.[1]

All land taxes, accordingly, except the tax on pure rent, will, according to Ricardo, fall on the consumers. But although every one is a consumer, not all consumers will pay the tax. One large class, in particular, will remain exempt — the laborers; for a tax on raw produce, like any tax which increases the price of necessaries of life, will inevitably raise wages. "Wages never continue much above that rate which nature and habit demand for the support of the labourer." But as wages rise, profits must fall. A land tax will therefore fall not on the landlord or the stockholders, but on the capitalist employer of labor.[2]

The question still remains whether the employer can shift the tax. In other words: What is the incidence of a tax on profits? Ricardo agrees with Adam Smith in holding that a tax on the profits of a particular class will be shifted to the consumers through a rise in price. But in the case of a tax on all profits, the problem is less simple. If no attention be paid to foreign trade, a rise of prices will ensue. But since money is a commodity imported from abroad, a rise in

[1] *On the Principles of Political Economy and Taxation*, chap. viii, pp. 194, 195, and chap. ix, p. 225. In McCulloch's ed. these are chap. ix, p. 91; and chap. xi, p. 104.

[2] *Ibid.*, p. 199 (McCulloch's ed., p. 93). Ricardo seeks to prove that there will not be any considerable interval between the rise in the price of corn and the rise of wages, during which the laborer would suffer. Here, as elsewhere, however, his conclusions are too rigid.

prices, if it occurred, could not be permanent. In return for commodities imported, the dear goods could not be exported. On the contrary, money would be exported until prices had fallen to their former level. The inference is that a tax on profits will be borne, not by the consumer, but by the producer.[1]

Finally, a tax on wages, he contends, will raise wages. Ricardo here discusses the objections raised by Buchanan to the doctrine of Adam Smith. He does indeed make the two important concessions that every rise in the price of necessaries does not necessarily raise wages, and that wages are not generally increased by the amount of the tax.[2] But with his characteristic fondness for the larger aspects of a problem, he goes on to argue as if these concessions did not invalidate his general doctrine. On the assumption, then, that taxes do raise

[1] "It appears to me absolutely certain that a well-regulated tax on profits would ultimately restore commodities, both of home and foreign manufacture, to the same money price which they bore before the tax was imposed." — *Ibid.*, chap. xiii, p. 283. (McCulloch's ed., chap. xv, p. 127.) *Cf.* chap. xvi, pp. 354, 355. (McCulloch's ed., chap. xviii, p. 155.)

[2] "It must therefore be conceded to Mr. Buchanan that any rise in the price of provisions occasioned by a deficient supply will not necessarily raise the money wages of labor. Taxes so far as they impair the net capital of the country diminish the demand for labor, and therefore it is a probable, but not a necessary, nor a peculiar consequence of a tax on wages, that though wages would rise, they would not rise by a sum precisely equal to the tax." — *Ibid.*, chap. xiv, pp. 288, 289, 297. (McCulloch's ed., chap. xvi, pp. 130, 133.) Yet in the very next paragraph he says that he agrees with Adam Smith. — In the first edition, 1817, pp. 492–3 Ricardo states that of the three shares in distribution, wages, profits, and rent, "it is from the two last portions only that any deductions can be made for taxes or for savings; the former, if moderate, constituting always the necessary expenses of production." In the 3d edition, 1821, p. 416 [*Works*, McCulloch's ed., p. 210] he adds: Perhaps this is expressed too strongly, as more is generally allotted to the labourer under the name of wages than the absolutely necessary expenses of production."

Professor Hollander, *Letters of Ricardo to McCulloch*, American Economic Association, 1895, pp. 60–61, adds an interesting note from a manuscript gloss by Ricardo himself in the copy of his work preserved in the library at Gatcomb Park. In this Ricardo further concedes that "the labourer will certainly be exposed to great inconvenience till the new state of things shall become established." Professor Hollander ascribes this concession to the influence of McCulloch. See below, p. 198.

wages, Ricardo concludes that they inevitably decrease profits.[1] He objects, however, to Adam Smith's contention that the tax will be shifted to the consumers. For, says he, since all producers are consumers of each other's goods, every dealer would raise his prices by the increase which he is compelled to pay; and this process would go on indefinitely, which is absurd.[2] Since the tax would, therefore, rest on profits, it is immaterial whether the taxes be levied on profits or on wages. It is always the profits of stock on which these taxes ultimately fall.

It will be readily seen that these teachings of Ricardo depend on the wage-fund theory, on his doctrine of profits, and on the law of economic rent. They stand or fall with the acceptance or rejection of his general theory of distribution. Two points, however, must be brought prominently forward — on the one hand, the difference between Adam Smith and Ricardo in results; on the other, the similarity in their methods.

Adam Smith, as we saw, holds that the landowners ultimately pay most of the taxes, bearing as they do all the taxes on land, and a great part of the taxes on wages and profits. The "rich consumers" pay a smaller part, and the lenders of capital still less. On the other hand, Ricardo maintains that the landowner pays only the taxes on rent proper, but shifts all the other taxes on land. Both Ricardo and Adam Smith agree that wages can never be reached by a tax; but Adam Smith regards the landowners, while Ricardo looks

[1] "Taxes on wages will raise wages and therefore will diminish the rate of the profits of stock . . . The only difference between a tax on necessaries and a tax on wages is that the former will necessarily be accompanied by a rise in the price of necessaries but the latter will not. . . . A tax on wages is wholly a tax on profits, a tax on necessaries is partly a tax on profits and partly a tax on rich consumers." — *On the Principles of Political Economy and Taxation*, p. 285. (McCulloch's ed., p. 129.)

[2] "If they could all raise the price of their goods so as to remunerate themselves with a profit for the tax: as they are all consumers of each other's commodities, it is obvious that the tax could never be paid; for who would be the contributors if all were compensated?" — *Ibid.*, p. 303. (McCulloch's ed., p. 135.)

upon the recipients of profits of stock, as the real taxpayers of the country. The one may be called the unconscious advocate of the landed interest, the other of the moneyed interest.

But while they differ in result, they largely agree in method. What Roscher calls the "magnificent abstractions" of Ricardo are perhaps the more impressive. In his reasoning, no allowance is made for conditions or qualifications. The law of competition is assumed as perfect in its operations. The absolute transferability of capital and labor is presupposed. The most far-reaching hypotheses are posited, in the belief — or, at all events, with the resulting belief on the part of the unwary reader — that they are exemplifications of actual facts. Everything is reduced to its simplest form. The complicated questions of industrial society are treated as more or less plain arithmetical problems. Even though Ricardo's fundamental theory of distribution were correct, his doctrine of incidence would thus be incomplete. It might, perhaps, be true so far as it went, but it would even then not go far enough to explain actual phenomena. It fails to notice the practical effects of economic friction. However much we may marvel at his power of analysis, we instinctively regard his conclusions with some suspicion. Ricardo's doctrine of incidence is in some respects premature and inadequate. Because of its rigidity and unyielding abstraction, it may be called *par excellence* the absolute theory.

CHAPTER III

The Equal-diffusion Theory

The germ of this doctrine can be found in the work of a renowned Italian economist of the eighteenth century, Verri. He lays down the general principle that every tax naturally tends to bring about an equilibrium because it strikes every one according to his consumption.[1] If the tax is levied on land, the prices of agricultural products will rise; if on wares and manufactured commodities, the merchants and artisans will demand more; if on the working classes, they will necessarily exact higher wages. Thus taxes always have an expansive force; they tend to seek a level in a continually larger sphere. From this point of view it would appear to make no difference whether taxes were imposed on one class or on another.[2]

But, after proving to his satisfaction, in detail, that taxes tend "to diffuse and to equalize themselves on consumption"[3] Verri maintains that this ostensible law of indifference is not really defensible. For this equalization of the burden of taxation always involves a continual struggle — a state of war — or, as he puts it in another place, a condition of revolu-

[1] "Ogni tributo naturalmente tende a livellarsi uniformemente su tutti gl' individui di uno stato a proporzione delle consumazioni di ciascuno." — *Meditazione sulla Economia Politica.* Di Pietro Verri Milanese. 1771, p. xxx. *Cf.* Custodi's Collection of *Scrittori Classici Italiani di Economia Politica, Parte Moderna*, tomo xv, p. 244. Milan, 1804.

[2] "Così il tributo ha sempre una forza espansiva per cui tende a livellarsi sulla sfera più vasta che si può. Riguardato da questo canto solo, parebbe indifferente che ei cadesse più su di una classe d' uomini che su di un' altra." — *Ibid.*, p. 247.

[3] "Chi più consuma più contribuisce al tributo; e il tributo, siccome dissi, si diffonde e conguaglia sulle consumazioni." — *Ibid.*, p. 253.

tion, between individuals and classes.[1] When the tax is imposed in first instance on the rich and powerful, they can easily shift it to the poor and weak; but when the tax is assessed directly on the weak, the shifting and equalization will take place slowly and with all those delays and obstacles which occur when the poor try to get justice from the rich. These intervals, Verri concludes, between the impulse and the final repose form the most important crises in national life, and are especially to be borne in mind in considering each transfer of taxation.[2] Verri accordingly is a strong advocate of the exemption of the poorer classes from taxation.

A few years even before Verri, the idea was advanced by an Englishman, Lord Mansfield. "I hold it to be true," said Mansfield, "that a tax laid in any place is like a pebble falling into and making a circle in a lake, till one circle produces and gives motion to another, and the whole circumference is agitated from the centre."[3] Mansfield, however, made no further application of the doctrine. Several years later, Dickson[4] described the process of the shifting of taxes, which he thought would result in a situation where all persons concerned would finally bear a just proportion of the increase of price due to the tax.[5]

[1] "Questo conguaglio e questa suddivisione del tributo è sempre uno stato di guerra fra ceto e ceto d' uomini." "Il tempo che trascorre fra la imposizione del tributo e il conguaglio, è un tempo di guerra e di rivoluzione." — *Ibid.*, pp. 253, 254.

[2] "Quando il possessore e il cittadino che ha fondi debbono anticipare il tributo, la suddivisione nel minuto popolo si fa sollecitamente e con poco ostacolo, perché egli è il potente che richiede ragione dal debole; ma quando il tributo immediatement cada di primo slancio sulla classe del debole, la suddivisione si farà, ma con quella lentezza o con quegli ostacoli che debbon nascere quando il debole e povero cerca ragione dal ricco e potente. Questi intervalli fra l' impulso e la quiete sono le crisi più importanti negli stati, e sono ben da osservarsi in ogni cambiamento di tributo." — *Ibid.*, p. 254.

[3] "Speech on Taxing the Colonies," 1766. In Lord Mansfield's *Collected Speeches*. Quoted by F. A. Walker, *The Wages Question*, p. 316.

[4] *An Essay on the Causes of the Present High Price of Provisions as connected with Luxury, Currency, Taxes, and National Debt.* [By Adam Dickson.] London, 1773.

[5] "In the payment of taxes, no man is a patriot; every person endeavors to

Another English writer of about the same date thought that a tax inevitably tends to raise the prices of all commodities, including those not taxed;[1] "for taxes, like the various streams which form a general inundation, by whatever channels they separately find admission, unite at last and overwhelm the whole."[2] Every one, therefore, really bears a part of the burden, even if the tax is not imposed upon him. In still another work, written toward the end of the eighteenth century by John Young, the same idea is expressed somewhat more fully.[3] Young maintains that taxes not only

evade them, or to oblige others to reimburse him for what he pays. The first can only be done in a small degree, the last is the method commonly taken. When a tax is laid upon any manufacture, the manufacturer, in order to carry on trade to the same extent as formerly, must either borrow money for which he must pay interest, or he must purchase at a longer credit, which, with respect to his selling, is the same thing with purchasing at a higher price. He must, therefore, lay upon the commodities which he sells the interest of the money which he borrows, or the additional price which he pays for the materials which he manufactures. Besides this, he lays upon the price of these commodities the whole tax which he pays. This at least with all his address he endeavors to do. The persons that consume the commodities which he manufactures, finding the prices of these raised, instead of retrenching, which is commonly a disagreeable thing, endeavor in their turn to raise the prices of the commodities in which they deal. Thus, if the tax makes a very considerable difference, the prices are raised in a rotation, and at last come to the manufacturer where the rise began, who, in consequence of this, if in his power, begins another rise, which every person will endeavor to push around in the same manner, so that a heavy tax naturally raises the prices of commodities gradually, till such time as they are fixed in such a state as to make all persons concerned bear a just proportion of it." — *An Essay*, pp. 66–67. [By Adam Dickson.] London, 1773.

[1] "Besides this, every new tax does not only affect the price of the commodity on which it is laid, but that of all others, whether taxed or not, and with which, at first sight, it seems to have no manner of connection. Thus, for instance, a tax on candles must raise the price of a coat, or a pair of breeches; because, out of these, all the taxes on the candles of the wool-comber, weaver, and the tailor, must be paid: A duty upon ale must raise the price of shoes; because from them all the taxes upon ale drank by the tanner, leather-dresser, and shoe-maker, which is not a little, must be refunded." — *Thoughts on the Causes and Consequences of the Present High Price of Provisions.* London, 1767, pp. 4, 5.

[2] *Ibid.*, p. 5.

[3] *Essays on the following Interesting Subjects: viz., I Government, II Revolution, etc., etc., VII Taxation, and VIII The Present War.* By John Young, D.D. Glasgow, 4th ed., 1794. The first ed. appeared also in 1794.

raise the price of the commodities taxed, but tend to lower the value of money, and thus to raise the prices of all other commodities. Ultimately, says he, they also increase wages. But laborers, providing they are willing to live on the produce of the country and be clad as their fathers were, in their own manufacture, "pay practically nothing to government and yet get higher wages." "Thus it appears," observes Young, "that though taxes newly imposed must be burdensome; because they take from the people so much of what was formerly their own; yet the longer they continue, they become the lighter: and, in process of time, they cease to be a burden at all." [1] "This may be thought a bold assertion," adds Young, "but it is capable of demonstration." [2]

Perhaps the most interesting and original exposition of the doctrine was made at about the same time by Andrew Hamilton, in a separate work on taxation which purported to be "the first regular attempt, which has been made, to supply this important chasm, in the science of government." [3] As no reference to this work has, so far as I know, ever been made by subsequent writers, it will be discussed at some length.

The third "Enquiry" in the second book bears the title: "concerning the question, on whom do taxes fall?" [4] Hamilton draws a sharp distinction between what he calls the Payers of Taxes and the Bearers of Taxes, the first class being also termed the Advancers of Taxes, [5] and he objects to the conclusion of both the "Economists" and Adam Smith as "hypothetical and uncertain," and springing not from experience but "from the theories of the speculative." [6] For it should be remembered that besides these abstract tendencies, there are other and more powerful circumstances occurring in the business of a great nation, whose contingent

[1] *Ibid.*, p. 128. [2] *Ibid.*, p. 125.

[3] *An Enquiry into the Principles of Taxation, chiefly applicable to Articles of immediate Consumption.* [By Andrew Hamilton.] London, 1790. Hamilton was a professor at Aberdeen. An octavo edition of the original quarto volume appeared the following year.

[4] *Op. cit.*, p. 134. [5] *Ibid.*, pp. 146–147. [6] *Ibid.*, pp. 142–143.

and unforeseen effects are continually coming in to prevent taxes from falling in the manner we should be ready to suppose.

Hamilton points out that in the course of progress the principal improvements in society consist of "the invention of machinery, the subdivision of labour and the growth of dexterity, exertion and skill in the labourer." Each of these furnishes a fund for the payment of taxes, for however the tax is advanced, it is paid for out of the surplus derived from the improvement.[1] To the claim that these improvements would come at all events, Hamilton rejoins that on the contrary they are due, directly or indirectly, "to the peace and security afforded by good government," and that taxes must be regarded as a "compensation for the blessing of government." It is hence illegitimate to attempt to solve the problem "by comparing the present situation of men paying taxes with what we may suppose their situations would have been, had no such taxes existed." Philosophers of the first rank like Adam Smith have fallen, he thinks, into this error. "They knew taxes must fall somewhere, *i.e.* be paid out of some fund," but their account of these funds is "not only untrue but mischievous." For the real fund is the economic improvement of society. When this exists, the individual may indeed pay the tax, but he does not really bear the burden.[2] Hamilton con-

[1] It is rather the improvements and the thriving situation of the society at large that may be said to sustain the taxes, than the individuals who merely pay them." — *An Enquiry into the Principles of Taxation*, p. 158.

[2] "If in a course of years the peace and security afforded by government have enabled men to make improvements by which they either increase their fortune or get more in exchange for it, they ought in justice to pay a small part of the advantages they have obtained to that government which has conduced so much to their obtaining them. If, in this situation, a new tax should take a part of such gains from them, I would not say that the tax falls on them because it renders them less rich than they would have been, but comparing their situation before the improvement and before the tax with what it is since both took place, and finding it now better than it was before, I would say indeed that they pay the tax (if I could be sure they really did so), but not that it falls on or is borne by them." — *Op. cit.*, p. 161.

cludes therefore that a tax "will be absorbed, as it were, by every improvement and be lightened or annihilated, according to the degree and number of the improvements which it meets with; *i.e.* instead of becoming heavier, taxes will become lighter, in proportion to the number of hands through which they pass in a thriving society."[1] But "in order to shew that improvements furnish funds for taxes, it is not necessary that we should be able accurately to trace the manner in which improvements insinuate themselves through society; nor how a tax is diffused among the various classes of citizens."[2]

It may, however, be asked: what happens when improvements are not continually made? Here Hamilton thinks that it depends on "the general state of demand."[3] He discusses the various hypotheses that "demand may be excited by a deficiency of supply," or that "taxes may operate in "stunting the effective demands," or finally that demand may so relieve the traders that taxes are paid back to the advancers of them, in the price of a taxed article."[4] That, however, does not end the matter, for "demand may be conceived so great and so general as to prevent taxes from falling anywhere for a very considerable time." "To illustrate this," he adds, "let us suppose a tax on some great necessary of life which all consume. That the demand for labour raises its wages; that merchants and manufacturers get their prices; that the demand for products, etc., raises the price of the produce of land; and that the growing demand for land raises the rent of the landlord. In such a case the tax would be thrown round in a circle by the mere force of a general increasing demand, and would, while this continued, be prevented from falling anywhere."[5]

The question thus arises: what happens to the ultimate consumer? Hamilton thinks that the consumer also may be relieved indirectly "if the demand for another article different from the one taxed were to enable a consumer to

[1] *Op. cit.*, p. 159. [2] *Ibid.*, p. 156. [3] *Ibid.*, p. 165.
[4] *Ibid.*, pp. 165, 168, 170. [5] *Ibid.*, p. 179.

pay the tax."[1] The real relief, however, of the consumers from taxes, Hamilton thinks, must arise from the extension of the market, and this relief is generally afforded in thriving societies."[2] He concedes, however, that when these conditions of demand do not obtain, taxes, by resting on them, may "both accelerate and aggravate the ruin of unfortunate individuals."[3] The general conclusion, then, is that "in stationary and declining societies, taxes on consumption fall universally on all ranks; and in thriving societies attach themselves to those citizens who are unprosperous at the time.[4]

In this interesting exposition, several points are to be noticed. In the first place, although Hamilton limits the theory in terms to taxes on consumable commodities, the reasoning is equally applicable to many other forms of taxes. We are therefore justified in calling it a general theory. In the second place, Hamilton employs "absorption" as well as "diffusion" as interchangeable terms, so that he may be called not only the founder of the diffusion theory, but also the originator of the absorption theory of incidence.[5]

[1] *An Enquiry into the Principles of Taxation*, p. 171. This argument is unsatisfactory, because the alleged indirect relief to the consumer is derived from a concomitant increase in the demand for the commodities produced by the consumer. But this increase is entirely irrespective of the tax. Hamilton virtually concedes this when he says (p. 174) : "This, to be sure, is an indirect relief from the tax, springing from a cause very different from and perhaps no way connected with the tax itself."

[2] *Op. cit.*, p. 182.

[3] *Ibid.*, p. 181.

[4] *Op. cit.*, pp. 182–183. Moreover, adds Hamilton, "as demand determines where taxes are to fall, and as it is fluctuating in its nature and ever varying, so the uncertainty of these variations must render it altogether impossible to foretell where any tax is to fall ; and although we could tell where it did fall to-day, yet a sudden change of circumstances, altogether out of our power, might determine it to fall on a different fund, or a different class of citizens, to-morrow." —*Ibid.*, p. 190.

[5] When the present writer suggested the term "absorption theory" for the doctrine of capitalization (Presidential address on "Social Aspects of Economic Law" in *Publications of the American Economic Association*, 1904, p. 66) he was unaware of the fact that it had been used over a century before as synonymous with the diffusion theory. See below, last chapter of this work. In addition to the passage on page 159 of Hamilton's book, mentioned above, he speaks in various

In the third place, Hamilton concedes that the diffusion (or what he calls the absorption) of taxes, while general or probable, is not inevitable, since cases may arise where the tax is borne by the one who pays it in first instance. In this respect Hamilton shows more perspicacity than most of the upholders of the diffusion theory. Altogether, it is a very remarkable contribution which ought not to have suffered complete oblivion.[1]

Verri, as well as the English writers, however, seems to have passed unnoticed. The theory in its modern form really dates back to the celebrated book of Canard,[2] which has now become so rare as to justify a somewhat fuller treatment.

Canard expounds his views in a work avowedly written to disprove the Physiocratic theory of incidence. According to him, there is not only a natural labor, — that is, labor necessary to sustain existence, — but also what he calls acquired labor, as well as superfluous labor. These three kinds of labor lay the foundation of all surpluses or rents. There are, therefore, three rents : *rente foncière*, the result of the fixed labor applied to land or industry; *rente industrielle*, the result of the *travail appris* in industry; and *rente mobilière*, the result of the *travail superflu* in commerce. The aim of every man is to turn his labor into that particular kind of occupation which will give him the greatest rent or surplus. From this mutual struggle results the system of "equilibrium of advantages," the laws of which are the explanation of all economic phenomena.[3] The balance or equilibrium of these three rents is the foundation of the law of incidence.

other places of taxes being "absorbed" by improvements. See *op. cit.*, pp. 179 and 190.

[1] Hamilton is also noteworthy first in that he distinguishes between "political," "commercial," and "revenue" taxes (*i.e.* social, prohibitive, and fiscal taxes), and secondly in that he emphasizes the possibility of taxes acting as a spur to industry. *Cf. op. cit.*, pp. 76 and 163.

[2] *Principes d'Économie Politique. Ouvrage couronné par l'Institut National.* Par N. F. Canard. Paris, an X (1801).

[3] "L'équilibre des rentes." — *Ibid.*, pp. 10–12.

All taxes, he continues, must be paid from one of these three rents, since a tax can never remain on the *travail naturel* which is necessary to existence. All taxes, again, are shifted because they disturb the equilibrium between the rents. Hence it makes no difference how a tax is imposed, whether on rent or on consumption. The incidence will always be the same; for a tax always diminishes the desire or "determination" of the buyer and seller, and no sale will take place until these desires are equalized by each party assuming one-half of the tax. This is the "equilibrium of the determination" to exchange. The first step in the shifting of taxes is then like this:[1] —

Total tax = T. . $\left\{ \frac{1}{2}\right.$ T is share of first seller.
Share of first buyer is $\frac{1}{2}$ T $\left\{ \frac{1}{4}\right.$ T is share of second seller.
Share of second buyer is . $\frac{1}{4}$ T $\left\{ \frac{1}{8}\right.$ T is share of third seller.
Share of third buyer is . . . $\frac{1}{8}$ T $\left\{ \frac{1}{16}\right.$ T is share of fourth seller.
Share of fourth buyer is . . . . $\frac{1}{16}$ T, etc.

But this is, of course, only the first step. The first seller will immediately see that he is bearing one-half of the tax, while only one-quarter rests on the buyer. He will perceive that the buyer's "determination" to exchange is stronger than his, and will, therefore, refuse to sell. But if the buyer assumes an additional share of the tax, as he well can, he will for the same reasons shift a part of the tax to the next seller, and so on. There will be no equilibrium until each bears an equal share.

To understand how the burden of the tax is distributed between buyer and seller, Canard likens the system of circulation of goods to a series of communicating tubes. No matter how much water we pour in or out of any one tube, every one of the other tubes will gain or lose until the level is again reached in all. Just as the water will seek its level by distributing itself proportionally to the diameter of each tube, so every tax will be distributed equally between buyers

[1] *Principes d'Économie Politique*, p. 158.

and sellers according to their capacity to labor.[1] Hence it is useless for economists to devise schemes for taxing forms of business which seem not to be hit by any existing tax. It is, moreover, utterly futile for the banker or merchant to hide his books; for the taxation of any one branch of industry is like the operation of cupping. The vein from which the surgeon has taken the blood is not more bloodless after the operation than any of the other veins of the body. So it is with the profits of any branch of industry which are diminished by a tax; the profits of all other branches flow in at once, until the equilibrium is restored.[2] It may be said, in fact, that the burden of the tax finally disappears, and that the tax is ultimately borne by no one at all.[3]

Canard, however, confesses that it takes some time for this equilibrium to be realized. There will, he admits, be many

[1] "Pour conçevoir comment l'impôt se répartit sur tous les acheteurs-vendeurs, imaginons une suite de tubes se communiquant entr'eux; si dans l'un d'eux on verse un liquide quelconque, il s'écoulera successivement dans tous les tubes, et l'écoulement cessera lorsqu'il y sera de niveau. Alors le liquide sera réparti dans tous les tubes proportionellement à leur diamètre, de même que l'impôt est réparti sur tous les acheteurs-vendeurs, proportionellement à la capacite de leur travail."—*Ibid.*, p. 161. "Les lois d'équilibre, dans le système général de la circulation, sont les mêmes que les lois de l'équilibre des fluides." —*Ibid.*, p. 233.

[2] "C'est donc bien vainement que les économistes s'épuisent en moyens pour chercher à atteindre par l'impôt les branches qui lui paraissent inaccessibles: l'impôt que l'on perçoit sur une branche d'industrie ressemble à la saignée que le chirurgien fait au bras; la veine qu'il a piquée n'est pas plus appauvrie du sang après l'opération, que toutes les autres parties du corps. Il en est de même du gain que l'impôt soutire d'une branche; le gain des autres branches vient tout-à-coup y affluer pour rétablier l'équilibre." —*Ibid.*, pp. 168, 169.

[3] "On peut dire, à la rigueur, que la charge de l'impôt finit par être tout-à-fait nulle, et n'est supportée par aucun individu." —*Ibid.*, p. 178. In another passage Canard pictures the process as follows: "Ainsi, voici la marche que suit la charge de l'impôt: 1° elle s'écoule d'abord de celui qui le paie le premier sur tous les autres acheteurs-vendeurs et consommateurs de la même branche; 2° delà elle se répand de proche en proche sur toutes les autres branches, par la nouvelle concurrence qu'apportent ceux qui quittent les branches imposées, pour s'attacher à celles qui ne le sont pas; 3° enfin, cet excés de concurrence va se perdre dans la branche immense de l'effort politique alimentée par l'impôt, et dont la consommation dédommage les autres branches de la diminution de la consommation superflue qui en résulte. Alors la charge de l'impôt est entièrement de niveau, alors elle n'est plus sentie." —*Ibid.*, p. 180.

contests between buyers and sellers and many difficulties in the way. These difficulties he calls the "friction of taxation." [1] During this period of returning equilibrium, even the "natural labor," or the wages of the ordinary laborer, may be affected by the tax. Moreover, this period of friction produces serious fluctuations, which throw all business into confusion until the equilibrium is again reached. It is not so much the tax which causes the trouble, as the derangement of the equilibrium. Hence, concludes Canard, we may advance this great truth: "Every old tax is good, every new tax is bad." [2] A government which does not possess a fixed, invariable system of taxation is like the planter who is continually changing his methods, but whose land, in the meantime, produces nothing, until the owner himself is ruined.[3] Every tax becomes good, provided it lasts long enough.[4] Curiously enough, Canard's practical solution of the problem is found in the proposal to replace all existing taxes by a tax on salt.

The theory of Canard was accepted by several writers, notably by Courcelle-Seneuil and Cherbuliez in France, and by Prittwitz in Germany. Courcelle-Seneuil tells us that old taxes act exactly like climatic or agricultural disadvantages. Society is poorer, says he, than it would be if these disadvantages did not exist, but the disadvantages are spread over the whole community.[5] Cherbuliez expresses the same

[1] "Cette difficulté, c'est ce que j'appellerai le frottement de l'impôt." — *Principes d'Économie Politique*, p. 181.

[2] "On voit donc que ce n'est pas l'impôt par lui même qui fait le mal, mais seulement le dérangement de l'équilibre qu'il cause. Donc on peut avancer cette grande vérité, que *tout vieil impôt est bon, et tout nouvel impôt est mauvais.*" — *Ibid.*, p. 197.

[3] "Un gouvernement qui n'a pas une manière fixe et invariable d'impositions, ressemble à un propriétaire qui, après avoir fait une plantation, s'en dégoûte, la change pour une autre, et celle-ci pour une autre encore; pendant ce temps la terre ne produit rien, et le propriétaire se ruine." — *Ibid.*, p. 198.

[4] "Tout impôt ne devient bon que par sa vétusté." — *Ibid.*, p. 233. *Cf.* p. 202.

[5] "Lorsque les impôts ont reçu la sanction du temps, ils ne touchent plus a la propriété d'aucun individu en particulier, parceque chacun a arrangé sa vie en vue de son existence. Ils agissent alors exactement comme les inconvénients du

idea, but in somewhat modified form, in saying that stability is the best quality of a tax system, as mobility is the worst. All taxes, he argues, no matter how bad at first, gradually become good.[1]

The theory reached its final stage in the German writer Prittwitz, who maintained that the only way to secure a just and equitable distribution of taxes was through a permanent, immutable system, and that this would be equally true, even though the system were at its inception the most absurd and burdensome one imaginable.[2] It is for this reason that the theory may be called the "optimistic" theory.

The writer who may be said to share with Canard the doubtful honor of founding the optimistic theory is Thiers. He wrote quite independently of Canard, and is of especial importance as being the popularizer[3] of the term "diffusion" of taxes — a term he borrows from the science of optics. He compares the shifting of taxes to the diffusion of the rays of light, and lays down his principle in the following words: "Taxes are shifted indefinitely, and tend to become a part of the prices of commodities, to such an extent that every one bears his share, not in proportion to what he pays to the state, but in proportion to what he consumes."[4] The argu-

climat et du sol : la société en général est moins riche que si ces inconvénients n'existaient pas ; mais cette diminution de richesse se trouve répartie de telle façon que toutes les forces mécaniques sont dans leur équilibre naturel." — *Traité théorique et pratique d'Économie Politique.* Par J. C. Courcelle-Seneuil. Paris, 1857. 2d ed., 1867, i, p. 462.

[1] "Tout système d'impôts, quelque vicieux qu'il puisse être en théorie, au point de vue de la répartition, va s'améliorant en pratique avec les années à mésure que les effêts immédiats du prélèvement sont amortis et successivement effacés par l'action toujours graduelle, souvent très lente, mais invariable et certaine, des lois qui gouvernent la vie économique des sociétés." — *Précis de la Science Économique et de ses principales Applications.* Par A. E. Cherbuliez. Paris, 1862, ii, p. 457.

[2] "Denkbar abenteuerlichste und drückendste" are the words. *Cf. Die Kunst reich zu werden, oder gemeinfaszliche Darstellung der Volkswirthschaft.* Von M. v. Prittwitz. Mannheim, 1840, pp. 515–522 ; and the same writer's *Theorie der Steuern und Zölle,* Stuttgart, 1842, pp. 107-116.

[3] Not the inventor, as was stated in the earlier editions. As we now know, Hamilton was the inventor of the term.

[4] L'impôt se répartit à l'infini, et tend à se confondre avec le prix des choses,

ments with which Thiers supports this thesis are as follows: The manufacturer who pays a tax, whether direct or indirect, adds the tax to the price of the commodity; for, consciously or not, he necessarily fixes the price so as to recompense him for all his outlays, plus a certain profit. Otherwise he would quit the business. The tax, then, is simply a part of the cost of production. This is true not only of the manufacturer, but of the farmer. If he is to remain in the occupation of agriculture, all his outlays must be made good. So, again, the laborer is in precisely the same situation; for unless his wages increase by the amount of the tax, he must change his occupation or die of hunger. Thus all taxes are indefinitely shifted.

When we remember that Thiers' whole work was written to prove the absolute rights of private property, we need not feel surprised at his conclusions. He tells us that, according to this most wise and reassuring law of providence, no matter what the government may do, it is always the rich who pay most of the taxes, because they consume the most.[1] To the socialists, he says: Hands off, do you not see that the rich already pay most of the taxes? To the radicals, who wish to restrict the province of indirect taxes because they bear heavily on the poor, he says: Stop, that is not true; the rich already pay more than their share.

The logical conclusion of what Thiers calls this "rigorously true" theory of incidence would undoubtedly be that it makes no difference what system of taxation is adopted. But, "God forbid that I should maintain such a heresy,"[2] cries Thiers, much to our surprise. He demands, in the first

au point que chacun en supporte sa part, non en raison de ce qu'il paye à l'État, mais en raison de ce qu'il consomme." — *De la Propriété*. Par M. A. Thiers. Paris, 1848, p. 381. *Cf.* "L'impôt se répercute à l'infini, et de répercussions en répercussions devient en définitive partie intégrante du prix des choses. C'est ce qui j'appelle la diffusion de l'impôt." — *Ibid.*, p. 382.

[1] "Par une loi des plus sages, des plus rassurantes de la Providence, de quelque façon que s'y prennent les gouvernements, le riche est après tout le plus soumis a l'impôt." — *Ibid.*, p. 389.

[2] "Dieu me préserve de soutenir une pareille hérésie."

place, equality of taxation, without attempting, however, to show in what this equality consists. Secondly, he makes the important concession that, although the tax is ultimately shifted, it is, for the time being, a burden on the first payer. But he at once complacently ignores these concessions and maintains that, in the long run, regardless of any act of the government, it is always the rich who pay the taxes.

It is to be noticed that this rather shallow doctrine of Thiers met with almost no success in France, where de Broglie is almost the only writer who has adopted it, in speaking of the "indefinite repercussion" of taxes.[1] It is remarkable, however, that it should have found adherents in other countries. The most noteworthy modern follower of Thiers is the Austrian professor, Stein, who goes so far as to declare the whole doctrine of shifting to be the result of a "marvellous confusion of thought." According to Stein, every tax is shifted by everybody on everybody, since everybody merely advances the tax for somebody else who uses his productions. From this theory logically follows that there is no need of a science of taxation. In place of the "confused doctrine" of the shifting of taxes, Stein propounded the "simple idea of the production of taxes," the idea that "the total amount of all taxes must be really produced every year as the surplus of production."[2]

Although this conception may be very "simple" to Stein, it must be confessed that even all subsequent German writers

[1] "Tout impôt tombe, en dernière analyse, sur le consommateur; tout impôt entre, comme élément intégrant, dans le prix des choses consommables." — *Le Libre Échange et l'Impôt. Études d'Économie Politique.* Par le Duc de Broglie. New ed. Paris, 1885, p. 48. The passage originally appeared in his monograph, *Les Impôts et les Emprunts*, published in 1849.

[2] *Lehrbuch der Finanzwissenschaft.* Von Dr. Lorenz von Stein. 4th ed. Leipzig, 1878, i, pp. 493–497: "Die Lehre von der Uberwälzung der Steuern ist eine der wunderlichsten Begriffsverwirrungen, die es je in der Wissenschaft gegeben hat. . . . Das grosse Resultat ist das jede Steuer von jedem auf jeden überwälzt wird. . . . An die Stelle der unklaren Ueberwälzung der Steuern tritt der klare Begriff der Production derselben. . . . Die Gesammtsumme aller Steuern muss alljährlich als Mehrwerth der Production von dem Volke wirklich producirt werden. . . . Das ist der einfache Begriff der Steuerproduction."

have declared themselves unable to understand what it means. We may, therefore, be excused from attempting to unravel the mystery.

In England, we find during the nineteenth century comparatively few allusions to the theory. Martin summed up the doctrine in the following words: "The public are the persons on whom the taxes fall, no matter how they may be artfully diverged in their course."[1] A few years later an anonymous writer devoted a volume to an attempt to prove that all taxes whatsoever finally fall upon the consumer.[2] This writer was evidently Gibbon, for in a subsequent work he treats the subject in much the same way, and states the equal-diffusion theory in almost the same words by saying that "all taxes, direct or indirect, paid by the producers or importers of commodities, and by the dealers therein, — ultimately fall upon, and are paid by, the consumers, by whomsoever such taxes may have been paid to the collectors thereof, or into the public chest."[3] Gibbon applied this rule to practically all taxes, for, according to him, "taxes on land are taxes on the produce of the land, and,

The most recent attempts to understand, and at the same time to combat, Stein are found in the two Dutch works: Cort van der Linden, *Leerboek der Financiën*, 1887, § 81, pp. 156–162; and Pierson, *Leerboek der Staathuishoudkunde*, 1890, ii, pp. 448–455; or *Principles of Economics* (tr. Wotzel), ii (1912), pp. 451–454.

[1] *Taxation of the British Empire.* By R. Montgomery Martin. London, 1833, p. 245.

[2] "All taxes, direct and indirect, paid by owners or occupiers of land; and all taxes paid by the dealers in the productions of land, on their way from the producer to the consumer — and all taxes whatsoever, paid by producers within the United Kingdom, and by importers of all commodities for home consumption, and by the dealers in all such commodities, on their way from such producer or importer to the consumer — as well as all taxes of Customs or of Excise imposed on such productions or commodities, by their measure or weight, — ultimately fall upon and are paid by the consumers of those productions or commodities, — by whomsoever such taxes may have been paid to the collectors thereof, or into the public chests." — *A Familiar Treatise on Taxation, Free Trade, etc., comprising Facts usually unnoticed or unconsidered in Theories of those Subjects.* London, 1846, p. 21. *Cf.* p. 46.

[3] *Taxation: its Nature and Properties, with Remarks on the Incidence and the Expediency of the Repeal of the Income Tax.* By Alexander Gibbon, Esq. London, 1851, p. 18.

like taxes on profits or income taxes, fall in the end on the consumers."[1]

In America, the few writers of prominence on the subject of taxation were, until recently, almost all followers of Thiers. America may, in fact, claim the honor of being the only country in the world where the doctrine is still upheld. The chief representative of this easy-going, complacent doctrine is David A. Wells. "Taxes equate and diffuse themselves," says he, "and if levied with certainty and uniformity they will, by a diffusion and repercussion, reach and burden all property with unerring certainty and equality. All taxation ultimately and necessarily falls on consumption."[2] In a later and more elaborate treatment of the subject[3] Wells affords a clearer picture of what he really means. In the first place, he qualifies his earlier statement by restricting the law to "taxes uniformly levied on all the subjects of taxation."[4] In the second place, he restricts the law, in its general formulation at least, to taxes on commodities or "things."[5] In regard to the first qualification, Wells really abandons the entire position. For he tells us that if taxation is unequal,

[1] *Ibid.*, pp. 19, 26, 33.

[2] Article "Taxation" in Lalor's *Cyclopædia of Political Science*, iii, p. 88. The editor of this cyclopædia makes the remarkable statement: "Mr. Wells' views are in harmony with those of Adam Smith, Ricardo, James Mill, Thiers, McCulloch and Say." A most remarkable jumble! — *Cf.* another statement of Mr. Wells' theory in the *Second Report of the New York Tax Commission*, 1872, p. 47, where he quotes Thiers approvingly.

[3] *The Theory and Practice of Taxation.* By David Ames Wells, New York, 1900.

[4] "Taxes uniformly levied on all the subjects of taxation and which are not so excessive as to become a prohibition on the use of the thing taxed, become therefore a part of the cost of all production, distribution, and consumption, and diffuse and equate themselves by natural laws in the same manner and in the same minute degree as all other elements that constitute the expenses of production." — *Op. cit.*, p. 584.

[5] "Taxes levied uniformly on things of the same class by the laws of competition, supply and demand, and the all-pervading mediums of labour, will be distributed, percussed, and repercussed to a remote degree until they finally fall upon every person in the proportion his consumption bears to the aggregate consumption of the taxed community." — *Ibid.*

the result will not follow. "It is not contended that unequal taxation on competitors of the same class, persons, or things diffuses itself, whether such inequality be the result of intention or of defective laws, and their more defective administration."[1] As exact equality is, however, an ideal impossible of attainment, it is difficult to see how Wells' law is applicable to the facts of actual life.[2] In regard to the second qualification, all of Wells' examples are taken from taxes on commodities or on classes of property, with two exceptions — special profits and incomes. He jauntily waves aside special profits by the statement that they are "exceedingly ephemeral," and he seeks to overcome the difficulty as to incomes by a very naïf answer in which he confuses diffusion with capitalization. "If it be asked, 'Will an income tax on a person retired from business be diffused?' the answer, beyond question, must be in the affirmative, if the tax is uniform on all persons and on all amounts, and is absolutely collected in minute sums.[3] Would any one pay the same price for a railroad bond which is subject to an income tax as he would pay for it if it were free from tax?"[4] Of taxes on monopolies, inheritances, and the like we hear nothing at all.

Wells protests against the inference that by "diffusion of taxes" he means that "every tax tends to distribute itself equitably over the whole surface of society."[5] With all

[1] *The Theory and Practice of Taxation*, p. 59.

[2] In calling attention to the undoubted fact that taxes sometimes actually do remain on the person who immediately pays them, Wells thinks that the observer "may not unfairly be compared to physicists who, constantly working with imperfect instruments, and constantly obtaining in consequence defective results, come at last to regard their errors as in the nature of established truths." *Op. cit.*, p. 598. I should on the contrary suggest that Wells resembles the physicist who, after elaborating the laws which are true *in vacuo*, applies them to a world in which there is no vacuum. The analogy is, however, imperfect because it assumes that the law which works *in vacuo* has been correctly formulated.

[3] Would Mr. Wells claim that such a tax has ever existed? [4] *Ibid.*, p. 586.

[5] "Such an implication as is sometimes used in popular and superficial discussion would be even more fallacious than an assumption that every expenditure made by an individual distributes itself in such a way that it becomes equally an expenditure by every other individual." — *Ibid.*, p. 597.

deference, however, it must be confessed that the distinction drawn by Wells is one between tweedledum and tweedledee. We are in entire sympathy with his attempt to show that in order to reach equality in taxation it is not necessary to tax every item of property through the general property tax; but it is a far cry from this contention to the statement that "taxes if levied with certainty and uniformity upon tangible property and fixed signs of property will, by a diffusion and repercussion, reach and burden all visible property, and also all the so-called 'invisible and intangible' property with unerring certainty and equality."[1] With what degree of "unerring certainty," we may venture to ask, will a tax levied "with certainty and uniformity" on the real estate of all railroads reach the subsequent purchaser of a railroad bond?

Wells is well nigh the only important American representative of this doctrine. The same theory, however, has been advanced, although in a somewhat less rigid form, by Isaac Sherman in the statement that "all proportional contributions to the state from direct competitors are diffused upon things and persons by a uniformity as manifest as is the pressure of water which is known to be uniform in all directions."[2] Even Judge Cooley is not entirely free from a share in this opinion.[3]

President Walker was the first American economist to question the truth of the optimistic theory.[4] He seems, however, to overlook the fact that this is only one among many theories of incidence, and that the problem of shifting cannot be solved simply by a negation of the equal-diffusion doctrine. It may also be mentioned that Alexander Hamilton, at the end of the eighteenth century, made an incidental allusion to the equal-diffusion theory, although the term

[1] *The Theory and Practice of Taxation*, p. 597.

[2] *The Exclusive Taxation of Real Estate and the Franchises of a Few Specified Moneyed Corporations.* By Isaac Sherman. New York, 1874.

[3] *A Treatise on the Law of Taxation.* By Thomas M. Cooley. Chicago, 1881, 2d ed., 1886, p. 38.

[4] *Political Economy.* By Francis A. Walker. 3d ed. New York, 1888, §§ 606–610.

was, of course, not employed by him. It is interesting to observe that in his treatment of taxes on consumption he uses almost the same metaphor which later on became common. "Imports, excises, and in general all duties upon articles of consumption may be compared to a fluid, which will in time find its level with the means of paying them. . . . In the course of time and things, an equilibrium, so far as is attainable in so complicated a subject, will be established everywhere."[1]

Hamilton, however, was too great a statesman to be deluded by the specious advantages of a system of taxation based on this theory. He was careful to point out that the important thing is to distribute the burdens equitably at first, and not to rely upon the supposed automatic working of any such general principle.[2]

In recent years this doctrine has again found a few half-hearted defenders in Great Britain. Sir E. Hamilton, for instance, tells us that "perhaps there is more truth than is popularly supposed in the optimistic theory of general diffusion,"[3] which he sums up in the first quotation from Wells mentioned above on page 167; and Lord Avebury quotes with approval the same sentiment, although both he and Sir E.

[1] *The Federalist*, No. 21. Ed. J. C. Hamilton. Philadelphia, 1877, p. 182.

[2] "Though it may be said that on the principle of a reciprocal influence of prices, whereon the taxes are laid in first instance, they will in the end be borne by all classes, yet it is of the greatest importance that no one should sink under the immediate pressure. The great art is to distribute the public burthens well, and not suffer them, either first or last, to fall too heavily on parts of the community, else distress and disorder must ensue; a shock given to any part of a political machine vibrates through the whole." — *The Continentalist*, No. 6, 1782. (*Works of Alexander Hamilton*, edited by Henry Cabot Lodge, i, p. 265.)

[3] In *Memoranda chiefly relating to the Classification and Incidence of Imperial and Local Taxes* of the *Royal Commission on Local Taxation*, 1899, pp. 51–52, Sir E. Hamilton's position is not, as he thinks, supported by the quotation in the note from Leonard H. Courtney's chapter on Finance, contained in *The Reign of Queen Victoria* edited by Thos. Humphry Ward in 1887, i, 332. When Mr. Courtney says that "there is some plausibility in the suggestion that in the end the burden reaches each back according to its capacity to bear it," he refers not to taxes in general, but to indirect taxes in the shape of customs and excise.

Hamilton fail to notice the qualifications in Wells' later formulation.[1]

It is indeed true that the diffusion theory marks, in some respects, a decided step in advance, in that it calls attention to the undoubted fact that we must go behind the first appearances and attempt to trace the effects of a tax to its ultimate consequences. And if the advocates of the doctrine were content to limit their statement to the possible consequences of some taxes, the doctrine would be not only plausible, but defensible. The real weakness of the theory consists in its attempting to prove too much. The old doctrine was that all taxes rest where they are assessed. The diffusion theory did excellent service in showing the fallacy of this statement; but it went to a like extreme in claiming that no taxes remain where they are imposed. The naïf earlier doctrine erred on the side of inadequate analysis; the new doctrine erred on the side of undue generalization. Some taxes, not all taxes, rest where they are imposed; some taxes, not all taxes, are shifted and diffused. But the element of truth in the diffusion theory is worth preserving, and we shall attempt later on to set it in its right proportion.[2]

If the general diffusion theory is hasty, the particular version of it which we have termed the optimistic theory is completely untenable. It is, in fact, so superficial that it scarcely deserves a refutation. The doctrine has never been accepted by any writers of importance, except the few already mentioned, and the weakness in the arguments advanced to support it has been shown a hundred times. It is needless to repeat these arguments here, as our review of the eclectic theories, as well as the whole positive and constructive part

[1] "Inaugural Address on Local and Imperial Revenues." By Lord Avebury, *Journal of the Royal Statistical Society*, vol. 64 (1901), p. 566. Lord Avebury in discussing my treatment of this topic says that "it is, however, easier to denounce a theory than to refute it, and this Professor Seligman does not seem to me to have even attempted." But see as to this, and as to the objections of Professor Bastable (who is included in the above condemnation), Bastable, *Public Finance*, 3d ed., 1903, p. 371, note 3.

[2] See the final chapter.

of the present monograph, will show the shallowness of the doctrine. Were the theory true, there would be no need for any investigation like the present.

What may be called the pessimistic theory is, like the optimistic theory, also based on the doctrine of diffusion; but it draws entirely different conclusions. Its chief apostle is the great anarchist, Proudhon. According to him, all taxes are, in last resort, taxes on the consumer. Try as the legislator may, he cannot prevent this shifting. The whole distinction between direct and indirect taxes, he concludes, is useless; and the result of such attempt at classification must always be "fiscal nonsense."[1] Since the mass of the consumers are poor, says he, all taxes are unjust, because they inevitably press on the poor more than on the rich. This fact constitutes the inevitable iniquity of taxation:[2] taxation is necessary, and yet it is necessarily unjust. This is one of Proudhon's famous "contradictions économiques." "The problem of taxation is hence insoluble. The fault lies neither with the principle of proportion, nor with the revolution, nor with the government; neither with ideas nor with men; the fault is to be found in the institutions, which themselves depend on the nature of things."

Proudhon's pessimism is as superficial as Thiers' optimism. Each contents itself with words instead of arguments. Yet, however widely they diverge in practical results, the theories virtually agree in asserting that it really makes no difference what sort of taxes are imposed. In the light of such theories

[1] "En resumé, de quelque manière qu'on s'y prenne avec l'impôt, on obtient zéro de résultat. C'est toujours la consommation qui le paye." . . . "Voici qui met le comble à la déraison fiscale. En dernière analyse, l'impôt est acquitté par la masse." — *Théorie de l'Impôt.* Par P. J. Proudhon. Paris, 1861. In new edition, *Œuvres Complètes,* Paris, 1868, vol. xv, pp. 206, 166.

[2] "L'iniquité de l'impôt ne vient donc pas de lui, elle a son principe dans ces transformations engrenées, dans cette oscillation universelle, dans ces inégalités organiques, qui sans cesse, par leur agitation incoercible, rejettent sur le produit, et conséquemment sur la masse des consommations, ce que l'impôt s'était efforcé de répartir entre les propriétés, les maisons, les industries, les capitaux, les loyers, etc." — *Ibid.,* p. 222.

as these, the whole science of finance appears to be a needless product of jugglery and mystification.

A recent American writer, Albert S. Bolles, may also be regarded as an advocate of the pessimistic theory, although he would probably resent any statement that he had been influenced by Proudhon. In fact, he bases his pessimism on the uncertainty of the process of shifting. According to Mr. Bolles, "no uniform law or rule prevails or can possibly be established with respect to the transfer (of taxes)." . . . "A tax which is fairly assessed on all property in the beginning proves a highly unjust tax in its operation. . . . Some are obliged to bear the whole burden, they can shift no part of it; others are more fortunate and shift a portion; others are engaged in such a business, or happily are owners of such property, that they can shift the whole, or nearly the whole burden." The whole system thus results in the greatest inequalities.[1]

It is true that Mr. Bolles applies his doctrine only to the general property tax. But the reasoning is equally applicable to other taxes; for in the matter of incidence there is very little difference, as we shall see, between a tax on property and one on profits. Almost all taxes may be considered, in one sense, taxes on profits. If it were true that a uniform tax always results in gross inequalities, the outlook for just taxation would indeed be poor. But, as will appear, it is an exaggeration to say that "uniform rules cannot be established." Pessimism we shall find to be as untenable as optimism.

[1] Report of A. S. Bolles in *Report of the Revenue Commission appointed by the Act of the Legislature of Pennsylvania, May 25, 1889*. Philadelphia, 1890, p. 142.

CHAPTER IV

THE CAPITALIZATION OR AMORTIZATION THEORY

THE origin of this theory is connected with the discussion of the land tax. To the extent that a land tax falls exclusively on the landowner, it was observed that the effect is to lower the value of the land by the capitalized value of the tax. In other words, since the value of land is fixed by its net produce, a tax which operates to decrease this net produce diminishes the value of the land by an amount equal to the capitalized value of the tax. The individual who purchases such land will pay for it only this diminished value. He will therefore be free of taxes, since he has discounted the tax by paying a smaller price for the land. The tax, in short, becomes a perpetual rent charge, allowance for which is made in any transfer of the property. From this argument the conclusion is drawn that a tax on land, after its first imposition, is borne by no one, since it is paid once and for all, and is then immediately shifted off in a capitalization of the tax. It is therefore entirely immaterial how low or how high the rate is, provided it be constant. This is known as the capitalization or amortization theory, according as we look to the increase or the diminution of the capital value. Applied especially to land, it is also known as the rent-charge theory, because the taxes are assumed to cease to be taxes on the owner, and to become rent charges in favor of the state.

The germ of this doctrine may be found in the work of some of the English writers of the eighteenth century. As far back as 1733, a pamphleteer of the excise controversy made an incidental allusion to the point. Speaking of the effect of a land tax, he says: "As for those who are late

Purchasers, they have little reason to complain, since they came in upon the Foot of the Tax, and have often had Allowance made them for it in the Purchase."[1] The author, however, draws no conclusions from this principle. Another writer of the same period advances a similar argument.[2] At a considerably later period, John Young developed the same point independently in an interesting passage intended to reënforce his general argument that the weight of taxes is not so burdensome as is generally believed. Young maintained that when a man bought a piece of land subject to a land tax, what he really purchased was the value of the land less the capitalized value of the tax, which belonged not to him, but to the government.[3]

The writers of the Physiocratic school in France, especially Turgot and Baudeau, also called attention to this phenomenon.[4] But the theory was without much influence until after the beginning of the nineteenth century.

The earliest of the nineteenth century writers to discuss this problem, and in some respects the most interesting, was John Craig. Craig, who has hitherto been singularly neglected, is worthy of notice as, with the exception of Hamilton, the only English writer to devote a separate volume to questions of taxation. He makes use of the argument advanced

[1] *The Nature of the Present Excise, and the Consequences of its Farther Extension examined.* In a letter to a Member of Parliament. London, 1733, p. 38.

[2] "As estates have been sold subject to the outgoings of Land Tax, the Purchasers have had an adequate Compensation in the Prices they have paid for those Out-goings." — *A Letter from the Mayor of the antient Borough of Guzzle-Down to Sir Francis Wronghead, their R—ve in P—t, in Answer to his Letter of the 19th of Feb., 1732.* London, 1733, p. 15. The same idea is found in *Occasional Letters upon Taxation.* By an Independent Man. London, 1780, p. 49.

[3] "Let the land tax be an instance. Suppose it fixed at a real two shillings in the pound, and rendered permanent. In that case, when a man buys an estate he knows what it must pay to Government; he buys it with that burden upon it, and the price is diminished accordingly. It is plain that if it is worth twenty-seven years' purchase with that burden, it would be worth thirty without it."— *Essays on the Following Interesting Subjects,* etc. By John Young, D.D. 4th ed., Glasgow, 1794, p. 125. See above, p. 154.

[4] See above, pp. 136, 137.

above, and tells us that the tax is "altogether paid by the present proprietors to the entire exemption of future purchasers."[1] But he limits the statement with an important condition, to be discussed in a moment, inattention to which has led succeeding authors to somewhat absurd results.

Some of the early German writers on public finance, such as Sartorius, Hoffmann and Murhard, went so far as to declare that, because of this capitalization, a land tax is no tax at all. Since it acts as a rent charge capitalized in the decreased value of the land,[2] they argue, a land tax involves a confiscation of the property of the original owner. On the other hand, since the future possessors would otherwise go scot free, it becomes necessary to levy some other kind of a tax on them.[3]

In France we find the theory expressed in part by J.-B. Say, although he does not draw the same conclusions.[4] The

[1] "As the free rent of land will be diminished by the tax, the price of each estate will proportionally decline. If the nett rent be reduced by a tax of 4 sh. in the pound, from £100 to £80 a year, the estate which was formerly worth £3,000 will no longer sell for more than £2,400. A proprietor therefore, who wishes to dispose of his land, will at once be deprived of one-fifth of his property. Instead of paying £20 a year during his possession, and leaving this annual payment as a burden on the lands, he finds himself obliged to pay £600 the value of the tax forever, while his successor is exempted from all contribution." — *Elements of Political Science.* By John Craig, Esq. Edinburgh, 1814, vol. iii, p. 38.

[2] The Germans call the rent-charge theory "Die Reallast-theorie der Grundsteuer."

[3] "Alle und jede fixirte Grundsteuern müssen sonach im Fortgange der Zeit und im Verkehre mit Grundstücken die Natur der Steuern gänzlich verlieren und sich in Staatsrenten verwandlen." — *Theorie und Politik der Besteuerung.* Von Dr. Karl Murhard. Göttingen, 1834, p. 295. *Cf.* p. 327. For the necessity of laying new taxes on future holders see *ibid.*, p. 366. *Cf.* similar passages in *Die Lehre von den Steuern als Anleitung zu gründlichen Urtheilen über das Steuerwesen.* Vorgetragen von J. G. Hoffmann. Berlin, 1840, p. 110. See also *Ueber die gleiche Besteuerung des Königsreichs Hanover.* Von Georg Friedrich Sartorius. Göttingen, 1815, p. 92. See also *Theorie der Steuern und Zölle.* Von Moriz v. Prittwitz. Stuttgart, 1842, p. 132.

[4] *Traité d'Économie Politique ou simple Exposition de la Manière dont se forment, se distribuent et se consomment les Richesses.* Par Jean-Baptiste Say. Paris, 1802, book iii, chap. x; 8th ed., 1876, p. 565: "Le propriétaire ne peut, même par la vente de son fonds, se soustraire au fardeau de l'impôt: car le fonds n'est payé en principal qu'en proportion de ce que l'impôt lui laisse valoir en

doctrine is most clearly expounded, however, in the work of Destutt de Tracy, who makes the "singular and important observation" that when a tax is laid on land, a value equal to the capital of the tax is at once taken from the actual proprietors, and that when all have changed owners, it is really no longer paid by any one. It is worthy of note that Tracy applies his doctrine, also, to taxes on houses and on annuities.[1] Several decades later the capitalization theory was most elaborately defended by Passy, who has often, but erroneously, been deemed the real founder of the doctrine. Since his time the doctrine has generally been known in France as the theory of the immutability of the land tax (*Théorie de la fixité de l'impôt*). Passy drew the logical conclusion that the rate of the tax ought never to be changed. To increase it would be to confiscate the property; to reduce it would be to make a free gift of the capitalized value of the tax to the landowner.[2] The theory has been accepted by several other French economists. Thus, Garnier maintains that a tax on land is really an expropriation of the original

revenu. . . . C'est comme si le gouvernement prenait un cinquième de la terre." In a work subsequently published by Craig, *Remarks on Some Fundamental Doctrines in Political Economy*, Edinburgh, 1821, he calls attention to the fact that Say entertained many of his views on taxation, although neither had seen the work of the other.

[1] *Eléments d'Idéologie.* Par Comte A. L. C. Destutt de Tracy. Paris, 1804. This was reprinted in 1823 under the title of *Traité d'Économie Politique. Cf.* the American translation by Thomas Jefferson, under the title *A Treatise on Political Economy.* By the Count Destutt Tracy. Translated from the unpublished French Original. Georgetown, D.C., 1817, pp. 207–210.

[2] "Une remarque essentielle, en ce qui concerne l'impôt territorial, c'est qu'il finit par ne plus être constitué à titre véritablement onéreux pour ceux qui l'acquittent. Cet effêt résulte des transmissions dont la terre est l'objet. . . . On ne peut élever le taux de l'impôt sans râvir aux propriétaires non seulement une portion des revenus dont ils jouissent, mais encore du capital même du nouveau tribut annuel mis à leur charge. On ne peut, au contraire, abaisser ce taux sans leur faire don d'une rente appartenant a l'état, et en même temps du capital de cette même rente." — Hippolyte Passy, article "Impôt" in *Dictionnaire de l'Économie Politique*, Paris, 1852, p. 902. Denis, *L'Impôt*, 1889, 161, errs in ascribing the origin of the doctrine to Passy. Pantaleoni, *Teoria della Traslazione dei Tributi*, 1882, p. 173, seems to make the same mistake.

owner, to the manifest advantage of the future proprietors.[1] We find the same ideas in Wolowski, Du Puynode, Cherbuliez and Walras.[2] The real weakness of their arguments has, moreover, not been perceived by subsequent French writers. Parieu, who was himself not very clear on the general subject, shows merely that the doctrine of immutability necessarily leads to the English idea of the redeemable rent charge.[3] Even Leroy-Beaulieu, although he terms it a "remarkably ingenious theory, with all the appearance of great scientific precision," simply objects that it is "much too absolute," without going to the pith of the controversy.[4] The doctrine itself probably attained its extreme form in the statement of the Austrian economist, Stein, that this question is the most important in the whole domain of taxation, and that the land tax ought never to be increased.[5]

In England the theory has seemed to derive some support from the fact that the land tax is indeed a redeemable rent

[1] "Un impôt foncier, quand on l'établit, est une sorte d'expropriation du propriétaire pour une certaine partie de son fonds; mais l'acheteur qui lui succède paye la terre en conséquence et ne subit plus l'impôt." — *Les Eléments des Finances.* Par Joseph Garnier. Paris, 1858. 4th ed., 1885, under title of *Traité de Finances,* pp. 100, 103.

[2] "Tout accroissement de l'impôt direct sur la propriété ne porte que le nom d'impôt: il est en réalité une confiscation partielle déguisée sous une apparence trompeuse." — Wolowski, in the *Journal des Economistes,* 1866, iv, p. 141. *Cf. De la Monnaie, du Crédit, et de l'Impôt.* Par Gustave du Puynode. Paris, 1853, ii, p. 171. See also *Précis de la Science Économique, et de ses Principales Applications.* Par A.-E. Cherbuliez. Paris, 1862, ii, p. 437. See also *Éléments d'Économie Politique Pure, ou Théorie de la Richesse Sociale.* Par Léon Walras. 3d ed., Lausanne, 1896, pp. 452–454; and the same author's earlier work, *Théorie Critique de l'Impôt,* 1861, p. 34.

[3] "Cette immutabilité n'est même que la timide prémisse de sa rachetabilité." — *Traité des Impôts considérés sous le Rapport Historique, Économique et Politique.* Par M. Esquirou de Parieu. Paris, 1862. 2d ed., 1866, i, p. 273.

[4] *Traité de la Science des Finances.* Par Paul Leroy-Beaulieu. Paris, 1876. 5th ed., 1892, i, p. 319; 7th ed., 1906, i, p. 401.

[5] "Im Allgemeinen ist nun kein Zweifel, dass eine solche Erhöhung im ganzen Gebiete der Besteuerung die ernsteste und wichtichste Frage ist welche überhaupt hier vorkommen kann . . . Das allgemeine Princip daher muss sein . . . dass die Grundsteuer niemals erhöht werden darf." — *Lehrbuch der Finanzwissenschaft.* Von Lorenz von Stein. 4th ed., 1878, ii, p. 55. In the 5th ed., 1886, this passage is omitted. *Cf.* ii, pp. 103–105.

charge. This, however, is owing to the peculiar circumstances of the case. The English land tax, which was originally a general property tax, came to be considered a fixed and invariable tax of four shillings in the pound. In 1798 it was made perpetual at that rate, and the landowners were given the privilege of redeeming it, that is, to free the land from taxation by paying a certain lump sum by way of composition. In England, therefore, the land tax is a redeemable rent charge only because expressly made so by statute. This is what led Gregg to maintain that the land tax was not a burden upon the land, because the state had become a permanent proprietor jointly with the owner of the estate. It also led Senior to express the same views in distinguishing between the incidence of a new tax and that of a fixed permanent land tax.[1] To draw any general conclusions as to the incidence of taxation in general from these peculiar conditions would, however, be inadmissible. The inference that it is always wrong to impose a new tax or to increase an old tax on land would be especially unjustifiable. The truth of the matter is that the whole theory applies to the land tax only where it is the sole tax levied. Furthermore, it is not at all peculiar to the land tax.

The truth of the latter part of this statement was already recognized in the eighteenth century by Young, who contended that the argument as to land taxes is equally applicable to "the house tax, the window tax, and all others that affect heritable property."[2] A step further, however, was taken by Craig — a fact that seems to have escaped the attention of succeeding economists; for he expressly tells us that his theory holds good only in case "a land tax be imposed without an equivalent duty on every other species of property." Craig further contends that exclusive taxes in general, like exclusive taxes on land, fall ultimately on the present proprietors of that species of property which is

[1] *Select Committee of the House of Lords on the Land Tax.* London, 1846, qu. 5379–5510. For the contemporary writers see *infra*, p. 183.

[2] *Essays*, etc. By John Young. 1794, p. 125. For full title, see above, p. 124.

taxed.[1] John Stuart Mill entertained practically the same opinion, although he did not work out his theory, but contented himself with asserting that a "peculiar tax on the income of any class, not balanced by taxes on other classes, is a violation of justice, and amounts to a partial confiscation."[2]

The other English writers have had little to say about the theory. Dudley Baxter, however, discusses the "strange theory" of the rent charge, as applied to the land tax, the poor rate and the succession, probate and legacy duties. Although he professes to discover three fallacies in the argument, none of his objections really goes to the root of the matter.[3] Noble, in his chapter which deals solely with the broad facts of incidence, mentions the rent-charge theory only in connection with the land tax.[4] Professor Sidgwick, who sees that the rent-charge theory applies only to a special tax on land, restricts the doctrine to "any particular kind of durable wealth, of which the supply is absolutely limited." But even he fails to recognize the real scope of the theory.[5]

Of recent years the point has again been made by Sir

[1] *Elements of Political Science*, iii, pp. 37, 82–86.

[2] *Principles of Political Economy*, book v, chap. iii, § 2. *Cf.*, however, the passage relating to a special tax on "realized property," which, according to him, "would fall exclusively on those who happened to compose the class when the tax is laid on." — *Ibid.*, book v, chap. i, § 3.

[3] *The Taxation of the United Kingdom*. By R. Dudley Baxter, M.A. London, 1869, pp. 50–55. Professor Heron, who distinctly recognizes the capitalization theory and states that "a fixed tax on rent in the process of time would absolutely injure no person," adds that the "rule is similar with regard to a tax on . . . dividends . . . and other funds." *Three Lectures on the Principles of Taxation delivered at Queen's College, Galway, in Hilary term, 1850*. By Denis Caulfield Heron. Dublin, 1850, p. 72.

[4] *National Finance: A Review of the Policy of the last two Parliaments, and of the Results of modern fiscal Legislation*. By John Noble. London, 1875, p. 282. *Cf.* the same author's *The Queen's Taxes: An Inquiry into the Amount, Incidence, and Economic Results of the Taxation of the United Kingdom*. London, 1870, p. 146.

[5] *The Principles of Political Economy*. By Henry Sidgwick. London, 1883, p. 569.

R. Giffen. In speaking of the "hereditary-burden theory,"[1] Sir Robert seems, however, to confuse the rent-charge theory with the diffusion theory, as when he quotes approvingly the "opinion that all old taxation tends to become equally diffused over the whole community," and adds: "The case of old rates, which tend to become a rent-charge on the property affected is, however, a very special case." The term "hereditary burden" is traceable to Bagehot in a passage which scarcely seems to justify the encomium of Giffen as being "the best exposition I know of."[2]

The only French writer, in addition to Destutt de Tracy, who attempted to generalize the conception of the capitalization of incidence was Cournot. He expounded the theory at an early period, although in other words. Above all, Cournot applied it only to articles subject to the law of monopoly;[3] he drew no general conclusions from the theory.

It was reserved for the German economists to give to the capitalization theory a more adequate presentation. The earliest writer to discuss it more fully was Rau, who showed that the theory was not entirely true of the land tax. In the first place, says he, the original owners or their heirs often

[1] In *Memoranda chiefly relating to the Classification and Incidence of Imperial and Local Taxes* of the *Royal Commission on Local Taxation*, 1899, p. 99.

[2] "For nearly three centuries the land has been liable to the relief of the poor. The owners of land have been burdened with that duty to the nation, and all land has been inherited and bought subject to it, and with notice of it. . . . The owners of land must therefore not complain of bearing national burdens. They have always borne national burdens, and the predecessors under whom they claim took the land on the condition of bearing them." — Walter Bagehot in *The Economist*, April 8, 1871, p. 407.

[3] "On peut même dire que cet impôt [fixed or proportional to net profits] ne fait tort qu'aux premiers possesseurs, aux inventeurs et en général à ceux qui jouissaient du fonds productif au moment de l'établissement de l'impôt, et à leur successeurs à titre gratuit. Car les successeurs à titre onéreux règlent leur prix d'acquisition sur le produit net, défalcation faite de l'impôt; et si le fonds vient à être dégrevé entre leurs mains, c'est pour eux une véritable épave." — *Récherches sur les Principes Mathématiques de la Théorie des Richesses.* Par Augustin Cournot. Paris, 1838, p. 75.

retain possession, so that there may be no chance for a diminution of the capital value through purchase and sale. Secondly, the value of land, he thinks, is fixed not alone by the net produce, but sometimes by other factors, such as a change in the demand or in the rate of interest. In such a case, it cannot be said that the new purchaser does not feel the tax, because it is difficult for him to realize clearly that he paid less for the land on account of the tax. So far as the theory is true, it applies only to so much of the land tax as exceeds the usual rate of taxes on other commodities. Above all, he concludes, the same argument is applicable to every tax levied on objects of varying value capable of sale — whether houses, stocks, bonds, or other capital.[1]

Other writers, such as Helferich and Hock, developed the doctrine,[2] and it has recently been clearly expounded by Schäffle.[3] The latter would naturally be expected to enlarge the rent-charge doctrine into a general theory of capitalization, because of his doctrine of the universality of the rent principle — the doctrine lately made familiar to English readers, which asserts that the theory of rent is not confined to land but is applicable to all the shares in distribution.[4] Since Schäffle emphasized this doctrine, the capitalization theory has been accepted by Pantaleoni[5] in Italy, and by

[1] *Grundsätze der Finanzwissenschaft.* Von Karl Heinrich Rau. Heidelberg, 1832. 5th ed., 1865, ii, pp. 22–27.

[2] "Ueber die Einführung einer Kapitalsteuer in Baden." Von Johann A. R. von Helferich. In Tübinger *Zeitschrift für die gesammte Staatswissenschaft*, 1846, pp. 291 *et seq.* *Cf. Die öffentlichen Abgaben und Schulden.* Von Dr. Carl Freiherrn von Hock. Stuttgart, 1863, pp. 111 *et seq.*

[3] Schäffle, in the book quoted in the next note, and also in *Die Steuern, Allgemeiner Theil.* Leipzig, 1895, § 212.

[4] Schäffle, *Die Grundsätze der Steuerpolitik und die schwebenden Finanzfragen.* Von Dr. Albert E. Fr. Schäffle. Tübingen, 1880, pp. 176, 187, 190. Schäffle's general theory of rent and profits was first published in 1867, in his *Nationalökonomische Theorie der ausschliessenden Absatzverhältnisse.* The theory was outlined as early as 1855 by Mangoldt in his *Die Lehre vom Unternehmergewinn.*

[5] Pantaleoni, *Traslazione dei Tributi*, p. 179, chides Schäffle for not giving credit to Rau. But he seems to forget that Craig preceded both Rau and Schäffle.

Pierson[1] in Holland. But they all fail to notice some of the qualifications which will be mentioned in the second part of this inquiry. We have been concerned here merely with the history of the idea. The doctrine itself, in its modern form, constitutes a part of the general theory of incidence to be discussed hereafter.[2]

[1] *Leerboek der Staatshuishoudkunde*. Door Mr. N. G. Pierson. Haarlem, 1890, ii, pp. 391–409; and *Principles of Economics*, ii (1912), 396–414, "Amortisation of Taxes."

[2] See below, part ii, chap. i, sec. 1, and also p. 200.

The consequences of capitalization were naturally recognized and widely discussed at the time of the passage of the British Land Tax Redemption Act in 1798. John Scott, *A Letter to the Right Honorable Chancellor of the Exchequer on his Proposed Sale of the Land Tax*, London, 1798, p. 9, speaks of the "Landholder buying the annihilation of his own land tax." Another writer explains how the purchaser "sinks or exonerates his tax": *Redemption and Sale of the Land Tax: Thoughts on that Interesting Subject and Remarks on the Original Act passed for that purpose in June, 1798; and on the Act lately passed, to explain and amend same*. London, 1799, p. 12. The advantages accruing to present owners through the 10 % discount and the three-year delay in payment are emphasized by Simeon Pope, *Interesting Suggestions to Proprietors and Trustees of Estates respecting the Land Tax Sale and Redemption Act*. London, 1798. *Cf.* also *Consequences of the Act for the Redemption of the Land Tax*. London, 1798. J. Brand, *The Alteration of the Constitution of the House of Commons and the Inequality of the Land Tax considered conjointly*, London, 1793, p. 52, makes the interesting point that "if an additional tax on land is devoted to the accumulation of a sinking fund, the selling price of estates will be very little if at all decreased; although their neat rents be at first diminished, yet, by the operation of such a fund, the rate of interest must be much reduced; and the year's purchase of neat landed income will be increased in the same proportion."

CHAPTER V

The Eclectic Theory

The absolute theory, as well as the equal-diffusion theory, soon met with considerable opposition. Most of the opponents, however, have confined themselves to criticism and to the elaboration of a few special points. Their doctrines may be summed up under the head of the eclectic school.

One of the first who attempted to show the weakness of both Canard and Ricardo was J.-B. Say. According to him, a tax on any article, when followed by a rise in price, falls on the consumer only in part; for increased price means diminished consumption, and smaller demand means lower profits. Thus, even here, he concludes, the producer will bear a part of the tax. The tax is like the powder that affects both the ball which it propels and the cannon which it causes to recoil.[1] Its effects are not felt wholly by the consumer — it never increases price by the full amount of the tax.

When the price of the article does not rise, Say continues, the producer bears the whole tax. But everything depends on whether the article is a necessary or a luxury. If the tax is levied on raw materials, for example, it affects more or less the prices of all other products. Direct taxes on producers, in the same way, affect consumers very unequally. As the doctrine of the transferability of capital is far more true of circulating than of fixed capital or of land, there is no such thing as an equality of profits; and therefore the producers of some commodities can shift the burden more easily than

[1] "C'est l'effort de la poudre qui agit à la fois sur le boulet qu'elle chasse et sur le canon qu'elle fait reculer." — *Traité d'Économie Politique.* Par J.-B. Say. Paris, 1802, book iii, chap. x; 8th ed., 1876, p. 562.

others. Moreover, Canard's analogy between the imposition of taxes and the cupping of the arm is misleading; for the wealth of society is not a fluid seeking its own level. It may rather be likened to a tree, one of whose branches may be killed without mortally wounding the tree; although the richer the branch, the greater the danger to the whole tree. But an analogy, however good, is not a proof. Hence, concludes Say, it is rash to affirm that a particular tax falls definitely on a certain class. Taxes fall, varying with the tax or with the state of the market, on those who cannot escape them; but the methods of escape are numberless. Nothing is more uncertain, nothing more variable, than the incidence of taxation.[1] The writers of the abstract school reason on assumptions to which the every-day facts give the lie.

On the other hand, Say immediately follows this statement with the assertion that a landowner can never shift a tax to the consumers — a statement which seems to be quite as absolute as those against which he directs his arguments. The land tax, he argues, will remain on the landowner, because the tax cannot normally affect the products; and, since the supply does not change, the price cannot. But still, Say concludes, it is impossible to lay down any detailed principles of incidence. In a machine so complicated as that of society, taxes are paid in many an elusive form.[2]

Another vigorous opponent of Ricardo was Sismondi. Sismondi starts out by asserting that in the case of taxes on arti-

[1] "On voit combien il est téméraire d'affirmer comme un principe général que tout impôt tombe définitivement sur telle classe de la société, ou sur telle autre. Les impôts tombent sur ceux qui ne peuvent pas s'y soustraire . . . mais les moyens de s'y soustraire varient a l'infini. . . . Rien n'est plus incertain, rien n'est plus variable que les proportions suivant lesquelles les diverses classes de la société supportent l'impôt." — *Ibid.*, p. 566. It is remarkable that Say has usually been regarded by English and American writers as an exponent of the equal-diffusion theory. In reality, he was one of its chief opponents. President Walker had already called attention to this fact. See his *Political Economy*, 3d ed., § 608.

[2] "Dans une machine sociale un peu compliquée, l'impôt s'acquitte sous bien des formes inaperçues." — *Ibid.*, p. 562, note.

cles of consumption, one can never say beforehand by whom they will be borne, because of the complexity of the conditions of the market. He discusses the "abstractions" of Ricardo, and especially his theory of taxes on raw produce and wages. Sismondi fulminates eloquently against the doctrines of the absolute equality of wages and of profits, and of the complete transferability of labor and capital—the corner-stone of Ricardo's theory. "What!" asks Sismondi, "are the farmers to become lawyers, or doctors, or clockmakers because their wages have been reduced? Will the laborers with horny hands and robust bodies all leave their fields and shut themselves up in the factories until agricultural wages have again risen? Beware of this dangerous theory of equilibrium. Beware of thinking it a matter of indifference where the burden is put. Beware of believing that if we tax necessaries of life, the poor will shift the burden on to the rich: A certain equilibrium will indeed be attained in the long run, but after the most frightful sufferings. Before it is established, the failures of the merchants, who must abandon their industry, will have caused the nation more loss than all the revenue from taxation; the misery and suffering of the laborers will have cost the nation more lives than the most destructive wars. These are the terrible methods of reëstablishing the equilibrium. It is this that we see when we abandon those abstractions which never ought to befog a science that deals with the happiness and welfare of men." In such strong language does Sismondi endeavor to combat the theories of the absolute school.[1] But, while Sismondi is so heated in his

[1] "Quoi! les cultivateurs se feront-ils avocats ou médecins, ou bien horlogers ou mécaniciens, parce que leurs salaires ne leur suffisent plus pour vivre? . . . Les laboureurs, dont le corps est accoutumé au grand air, dont les mains endurcies sont rendues incapables de toute opération délicate, dont la santé requiert un exercice violent, dont l'âme a besoin des jouissances des champs, s'enfermeront-ils dans une filature de coton? Quoi! enfin, parce qu'un impôt sur les farines ferait monter le pain de 4 à 6 sous la livre, les laboureurs quitteraient les champs pour venir s'enfermer dans les villes, jusqu'à ce que le salaire des ouvriers des champs fût porté plus haut? . . . Gardons-nous de la dangereuse théorie de cet équilibre qui se rétablit de lui-même! Gardons-nous de croire qu'il soit indifférent dans quel bassin de la balance on met ou l'on ôte un poids, parce que les autres

criticism, he does not attempt any constructive work; he even goes so far as to say that he is unable to discover any general principles.

Another French writer who treated the subject, but in a manner less profound than some of his successors, is Garnier, who contends that, in the long run, taxes finally fall on the consumer. He maintains, however, that there are many limitations which prevent the producer from always shifting the burden to the consumer. Above all, he denies that the diffusion of taxes leads to an exemption of the taxpayers: "division, diffusion, and repercussion are unfortunately not the synonyms of evaporation."[1]

A more important writer is Parieu. This writer's terminology is confusing; he continually confounds the words "incidence" and "shifting," and speaks of direct and indirect incidence. His matter, however, is far better than his form of presentation. Parieu criticises those who maintain that all taxes are added to the cost of production, and thus distributed to the consumers. This theory is false, and much exaggerated, cries Parieu. If the argument were sound, it would not be worth while to write any books on taxation, or to devote any

ne tarderont pas à se compenser! Gardons-nous de croire qu'en chargeant d'un impôt les objets de première nécessité, si les pauvres en font l'avance, les riches finiront par le rembourser! Un certain équilibre se rétablit, il est vrai, à la longue, mais c'est par une effroyable souffrance. . . . Mais, avant que cet équilibre soit rétabli, la faillite de tous les négociants, dans les branches d'industrie qu'il faudrait abandonner, aurait enlevé à la nation beaucoup plus de capitaux, en pure perte, que l'impôt n'aurait rapporté de revenus au fisc. De même la mortalité parmi les ouvriers qui ne trouvent plus de gagne-pain, aurait enlevé à la nation plus de vies que la plus désastreuse campagne. C'est par ces moyens terribles que la balance politique se relève; et, lorsqu'on descend des abstractions, où il ne faut jamais envelopper une science qui décide du bonheur et de la vie des hommes, c'est ainsi que s'opère le redressement." — *Nouveaux Principes d'Économie Politique, ou de la Richesse dans ses Rapports avec la Population.* Par J. C. L. Simonde de Sismondi. Paris, 1819, book vi, chap. 6; 2d ed., Paris, 1827, ii, pp. 219–223.

[1] *Traité de Finances.* Par Joseph Garnier. Paris, 1858; 4th ed., 1883, p. 26. Garnier errs, however, in ascribing this theory to Ricardo. It was the theory of Canard and Thiers, not of Ricardo. It is remarkable that Canard has been almost completely neglected by the French writers themselves.

thought to the matter; for, as all taxes would be alike in their results, there would be no choice between them. Parieu maintains, however, that it is possible to lay down one or two general principles, which he formulates in this way: Taxes remain in the first instance on the original taxpayer, if the taxable commodity is not susceptible of restriction of supply. In proportion as the supply can be diminished, the tax will be shifted to other classes. If the individual on whom the tax has been shifted is, in his turn, in a position to restrict his enjoyments, he will neutralize in part the effect of this shifting, and will shift the tax either back to the original taxpayer or on to some other class.[1]

This leading principle Parieu applies to the various kinds of taxes. There is no doubt that he here strikes the key-note of what may be called the quantitative or mathematical theory, which will be discussed later on. What Parieu says is true, as far as it goes, and, rightly interpreted, furnishes a clue to many of the difficulties of the subject; but Parieu devotes only a few pages to the whole topic and makes no effort to get beyond vague generalizations. He concludes that, as a general rule, "the imposition of taxes, except in the case of taxes on commodities levied wholesale on the producer, cannot be regarded as producing a shifting which completely inverts the first natural effects of the tax. In most cases, the whole or the greater part of the tax remains on him who pays it actually or ostensibly in the first or second degree of the incidence."[2] Although he did not

[1] "L'impôt reste, au moins immédiatement, à la charge de celui qui le paye, si l'objet sur lequel il est assis n'est pas susceptible du réstriction. Il est rejeté en tout ou partie sur d'autres contribuables, si l'objet sur lequel il est assis est susceptible de restriction, et la répercussion de l'impôt est en raison même de la facilité de cette restriction. Si celui sur lequel l'impôt est réflechi est à son tour en état de reserrer la jouissance à l'occasion de laquelle il reçoit le contre-coup de la taxe, il neutralisera en partie l'effet de la répercussion de l'impôt en la rejetant, soit sur le contribuable primitif, soit sur d'autres." — *Traité des Impôts, considérés sous le Rapport Historique, Economique et Politique.* Par M. Esquirou de Parieu. Paris, 1862; 2d ed., 1866, i, p. 68.

[2] "L'incidence des taxes ne peut être considerée comme réalisant, si ce n'est pour les denrées frappées en gros chez les producteurs, une réflexion complètement

grasp the whole subject, and did not even develop his own principle successfully, Parieu deserves more than a passing notice as pointing out one of the most important elements in the solution of the problem.

The other French writers have not contributed materially to the solution of the problem. Thus, the work of Du Puynode is voluminous but not very critical. He makes the whole subject extremely simple. According to his theory, taxes on land as well as those on houses are ordinarily borne by the owners: "all the imaginary distinctions of Smith and Ricardo are without foundation."[1] Taxes on personal property or profits, he contends, are always shifted to the consumer; while taxes on wages always rest on the laborer by whom they are paid in first instance.[2] It is easy, of course, to solve the problems in this way.

The volumes of Vignes are important in the study of many other aspects of taxation, but his treatment of incidence is not especially noteworthy, except for the fact that he opposes both the theory of "scepticism" and that of "equal diffusion."[3] He deals, however, mainly with special taxes, and does not seem well acquainted with the literature. Some of his views are interesting and will be noticed later.

Finally, Leroy-Beaulieu, in his comprehensive treatise on public finance, skims over the general problem. We do, indeed, find a few strong passages scattered through the volume, but only in connection with special points.[4] While admitting that there is a certain element of truth in the

déstructive, des premiers effets naturels de l'imposition. Dans la plupart des cas, tout ou partie de la charge reste réellement imposée sur celui qui supporte visiblement et ostensiblement dans le premier ou le second degré de son incidence." — *Ibid.*, p. 83.

[1] *De la Monnaie, du Credit et de l'Impôt.* Par Gustave du Puynode. Paris, 1853, ii, p. 175.

[2] *Ibid.*, ii, pp. 215, 321, 365.

[3] *Traitè des Impôts en France.* Par M. Edouard Vignes. 4th ed., by Vergniaud. Paris, 1880, ii, pp. 68, 97, 118, and 173.

[4] *Traité de la Science des Finances.* Par Paul Leroy-Beaulieu. 5th ed., 1892, i, pp. 180, 413, and 769–771. In his recent *Traité Théorique et Pratique d'Économie Politique*, 2d ed., 1896, Leroy-Beaulieu devotes several pages to the

"general repercussion" doctrine, he warns his readers against placing too much reliance on it. We search through his works in vain for anything constructive. Much the same may be said of Stourm, whose discussion is chiefly critical and negative, and who renounces any attempt to solve the problem.[1]

In Germany we find more noteworthy contributions to the subject. The early German writers on public finance — such as Soden, Jakob, Fulda, Malchus, Biersack and Murhard — may be passed over as comparatively insignificant. They certainly made no definite impression on the course of the theory.[2] One of the early Germans, von Thünen, must, however, be mentioned because of his prominence in other domains of economic science.

Von Thünen devotes only a small portion of his remarkable work to the problem of taxation, and there discusses principally the incidence of the land tax. But his doctrine is worth noticing as showing how the equal-diffusion theory, logically developed, results in an absurdity. "It would seem then," he says, "that the state can increase its taxes to any conceivable extent, without harming the community, since every active citizen would bear the tax only nominally if he were simply to advance the tax without paying it in last instance. But this remarkable conclusion," adds von Thünen, "depends on the assumption that, after the imposition of the tax, the consumption of commodities remains the same. And that is, of course, the weak point of the theory."[3]

general topic (iv, pp. 791–799), but contents himself with a few unsatisfactory generalizations.

[1] "Aujourd'hui on renonce à ces subtilités." — *Systèmes Généraux d'Impôts.* Par René Stourm. Paris, 1893, p. 12. *Cf.* also the 2d ed., 1903.

[2] Those who desire to study in detail the views of these rather unimportant writers are referred to the books of Kaizl and Falck (mentioned above, p. 17), who deal especially with the German authors.

[3] "Die Schlüsse, wodurch wir dieses sehr auffallende Resultat erhalten, beruhen auf der Voraussetzung, dass nach der Einführung der Abgabe die Consumtion dieselbe bleibt." — *Der isolirte Staat, in Beziehung auf Landwirthschaft und Nationalökonomie.* Von Johann Heinrich von Thünen. Hamburg, 1826, pp. 264–265; 3d ed., Berlin, 1875, part i, p. 337. *Cf.* the translation by Laverrière: *Recherches sur l'influence que le Prix des Grains, la Richesse du Sol et les Impôts exercent sur les Systèmes de Culture.* Paris, 1851, p. 292.

With Rau, however, we come to some positive results. Rau lays down his conclusions in the seven following principles: 1. A tax can be shifted only when it induces the majority of the taxpayers to a uniform conduct, which brings about a change in supply and demand. 2. A tax assessed on the income of an entire class cannot be easily shifted to the vendors of certain goods, because the restriction of the taxpayers' expenses affects different commodities unequally, so that the slight decrease of the demand will often be counterbalanced by a decrease of the supply. 3. Taxes will be shifted most easily on the consumers when all the sellers see themselves equally forced to make good the tax by decreasing supply, as in the case of customs duties. 4. Taxes on classes with fixed incomes, like public officials, cannot possibly be shifted. 5. Taxes which are not assessed according to the quality of goods for sale are less easily shifted than others. 6. In taxes on rent, on the source of profits, and on wages or profits, the important consideration is whether the taxpayer can escape the tax through a change in investments. 7. The transference of taxation cannot excuse an unjust system of assessment, because (*a*) the shifting is often more apparent than real, (*b*) if only a few taxpayers are assessed too high or too low, prices will not be affected, (*c*) in the interval many hardships are sure to ensue, and (*d*) even a complete shifting of a high tax is not without bad results because it often diminishes both production and consumption.[1] These principles of Rau, as we shall see hereafter, are of considerable help in the investigation of special problems.

[1] *Grundsätze der Finanzwissenschaft.* Von Dr. Karl Heinrich Rau. Heidelberg, 1832; 5th ed., 1864, iii, pp. 412–417. The sixth point reads as follows: "Insbesondere kommt es bei Steuern, die den Ertrag einer einzelnen Güterquelle zu treffen bestimmt sind, darauf an, ob der Besteuerte durch eine anderweitige Verwendung jener Quelle oder andere Einrichtungen der Auflage ausweichen kann. Dies wird in vielen Fällen durch die Beschaffenheit des werbenden Vermögens verhindert. . . . Desshalb bleiben die meisten Steuern auf den Renten des werbenden Vermögens liegen, die auch wirklich den grössten Theil des steuerbaren Einkommens ausmachen, oder werden noch auf sie hinübergewälzt."

More important, and in some respects the most suggestive of the works hitherto considered, is the book of von Hock. This author was the first to analyze and define the various kinds of shiftings — the shifting forward, the shifting backward, and the shifting off, terms to which allusion has been made in the introduction.[1] He maintains that, from the standpoint of the taxpayer, the tax must always be (1) a part of the cost of production of the commodity taxed, (2) a part of the general business expenses, (3) a part of the cost of subsistence, or (4) a burden on the net revenue or income. Examples would be, respectively, a tax on the manufacture of spirits, a license or business tax, a poll or house tax, and an income tax. In general, taxes of class one, class two and class three — so far as the necessaries of life are concerned — are virtually additions to the cost of production, and thus tend to be shifted to the consumer. But this general rule has many exceptions, which may be summed up as follows:[2] (*a*) There will be no shifting *in general* and *for a long period* when the tax is so high as to produce a decrease of demand, or a substitution of inferior products on the part of the consumer. (*b*) There will be no shifting *temporarily*, when the state of the market changes so that the price of the articles falls below the price before the tax was imposed. (*c*) The exceptions to the shifting of taxes on necessaries of life are far more frequent and dangerous to the laborer than the above exceptions to the producer; for wages vary frequently, and an increase of price in the necessaries of life, joined with a low rate of wages, has the most lamentable results.

While Hock, therefore, accepts in general the cost of production theory of taxation, he is by no means a follower of Canard or Thiers. He confesses that, in the long run, the shifting of some taxes will produce an equilibrium — only this is not a fixed equilibrium, but one that is continually dis-

[1] He termed these "Fortwälzung," "Ruckwälzung" and "Abwälzung" — all of them modes of "Ueberwälzung" or shifting.

[2] *Die öffentlichen Abgaben und Schulden.* Von Dr. Carl Freiherrn von Hock. Stuttgart, 1863, pp. 91–96.

turbed by the conditions of the market and is completely overthrown by every important economic reform. Above all, he adds, it is not to be assumed that this equilibrium is necessarily just, or even beneficial, from the economic point of view; for under certain conditions the shifting of taxation may increase, and not decrease, the original injustice. The optimistic theory of diffusion is, then, utterly untenable.[1]

Prince-Smith seeks to solve the problem in somewhat the same way. He ridicules the diffusion theory which virtually maintains that the burden of taxation, like the ball in the game of shuttlecock and battledoor, is continually thrown from hand to hand, and always remains suspended in the air without ever falling on anybody.[2] On the contrary, says he, the shifting of taxation depends on certain conditions. It can take place only through increase of price; and increase of price can be due only to increased demand or decreased supply. As the producer cannot increase the demand, he must reduce the supply. Apart from the question of outlets in international trade, this is possible only through limitation of production — that is, by the transfer of capital and labor to other occupations. The whole problem of shifting thus reduces itself to the question: Which is more injurious — to bear the tax without shifting, or to suffer through the limitation of production? In general, he concludes, a tax will be shifted only when the transfer brings in more than it costs. In other words, the whole question of incidence is, according to Prince-Smith, simply a question of calculation. Applying his theory to practical cases, he thinks that the land tax and

[1] "Es ist allerdings wahr, dass die Uberwälzung der Steuern zulezt eine Ausgleichung zur Folge habe, allein das hierdurch hergestellte Gleichgewicht ist ein labiles, das jeden Augenblick durch die Schwankungen des Marktes gestört und durch jede tiefer greifende wirthschaftliche Reform ganz aufgehoben wird. . . . Es kann unter gewissen politischen und commerciellen Vorbedingungen die Steuer durch fortgesetzte Ueberwälzungen eben so leicht ungerechter und schädlicher werden als das Gegentheil." — *Ibid.*, pp. 108, 109.

[2] "Ueber die Abwälzung." Von John Prince-Smith. In *Vierteljahrschrift für Volkswirthschaft und Kulturgeschichte*, xiii (1866), p. 130. Reprinted in his *Gesammelte Schriften*. Berlin, 1877, i, pp. 43-64.

the house tax cannot be shifted, and that the indirect taxes or taxes on wages can be shifted only through the bankruptcy of the weakest, and that bankruptcy of the laborer means starvation and death. As a protest against the absolute and diffusion theories, Prince-Smith makes a strong case, although some of his own positions are not always tenable.

The more recent German writers on public finance have, with few exceptions, done little to advance investigation along these lines. For example, Roscher follows in the main the exposition of the older English writers.[1] Schäffle deals chiefly with the question of capitalization.[2] Wagner, even in the last edition of his great work, bases his exposition primarily on the works of Rau and Hock, and does not really get beyond them.[3] Cohn contents himself with a few vague generalizations which are of little use.[4] Vocke practically limits himself to the statement that reliance on the general shifting of taxes is treacherous, and that the whole subject properly belongs to the general economic doctrine of cost of production.[5] Von Schall, the author of the latest monograph on taxation, devotes four and a half pages to the topic of shifting. We accordingly find in his exposition little but platitudes.[6] In fact, the recent German literature is significant mainly for the fact that it attempts, sometimes very successfully, to evade the difficulties of the problem.

[1] *System der Finanzwissenschaft.* Von Wilhelm Roscher. Stuttgart, 1886, §§ 38–43.

[2] *Die Grundsätze der Steuerpolitik und die Schwebenden Finanzfragen.* Von Dr. Albert E. Fr. Schäffle. Tübingen, 1880, pp. 173–192. His most recent work discusses the topic somewhat more broadly, but is somewhat lacking in precision. *Die Steuern, Allgemeiner Theil,* 1895, drittes Buch, I Haupteintheilung, IV Abschnitt, 3 Kapitel.

[3] *Finanzwissenschaft.* Von Adolph Wagner. Leipzig, 1880, ii; 2d ed., 1890, pp. 332–372.

[4] *System der Finanzwissenschaft.* Von Gustav Cohn. Stuttgart, 1889, pp. 304–311. English translation by T. B. Veblen under the title of *The Science of Finance.* Chicago, 1895, pp. 365–373.

[5] *Die Grundzüge der Finanzwissenschaft.* Von Dr. Wilhelm Vocke. Leipzig, 1894, pp. 205–212.

[6] "Allgemeine Steuerlehre." Von K. Fr. v. Schall. In Schönberg's *Handbuch der politischen Oekonomie.* Tübingen, 4th ed., iii, 1897, pp. 236–240.

The English writers who have not yet been mentioned may be passed over with a few words. Richard Jones was one of the first to deny the Ricardian doctrine of incidence, as he was the first to dispute Ricardo's theory of distribution. He confined himself almost exclusively to the tax on wages and that on consumable commodities. Jones maintained that it is impossible to tell beforehand the ultimate incidence of a tax on wages; for this, he said, depends upon the effect of the tax upon the movements of population. If the tax were laid on wages, under such circumstances that it would not affect the movement of population but would be met by a sacrifice of secondary gratifications, it would not be shifted. Only under conditions the reverse of these would the tax be shifted from wages to profits.[1]

David Buchanan had preceded Jones in controverting some of Adam Smith's doctrines on incidence. He took exception to the distinction between the ground rent and the building rent in the house tax.[2] Above all, he opposed the view that a tax on labor will produce a corresponding rise in wages. If wages were always at the bare minimum point, then indeed, he admitted, the doctrine might be true; but "while the wages of labor afford comforts and even luxuries, the laborer will always possess a fund for the payment of taxes. . . . All taxes on labor, or on such commodities as the laborer consumes, take effect by abridging his comforts. They increase the hardships, and tend generally to degrade the condition of the laboring classes."[3] We have already seen that the argument of Buchanan induced Ricardo to make a qualification of his rigid theory.[4]

[1] "Tract on the Incidence of Taxes on Commodities that are consumed by the Laborer." By Rev. Richard Jones. In *Literary Remains, consisting of Lectures and Tracts on Political Economy.* London, 1858, pp. 143. *Cf.* "A Short Tract on Political Economy," *ibid.*, p. 277.

[2] *An Inquiry into the Nature and Causes of the Wealth of Nations.* By Adam Smith, LL.D. With Notes and an Additional Volume, by David Buchanan. Edinburgh, 1817, iii, p. 300, note.

[3] *Ibid.*, pp. 338, 339. See also *Observations on the Subjects treated of in Dr. Smith's Inquiry, etc.* By David Buchanan. Edinburgh, 1817, 2d ed., pp. 59–64.

[4] Above, p. 119.

James Mill, although he seeks to differentiate the doctrine in some points, is, on the whole, a follower of Ricardo. Mill maintains that a tax on produce or on farmers' profits is shifted to the consumer. So, also, he says, a tax on profits of stock will fall on profits. On the other hand, Mill accepts Ricardo's theory of the tax on wages, but only on the assumption that wages are at the lowest point to which they can be reduced. Otherwise, he thinks, a tax on wages will not be shifted to profits.[1]

Senior confines his discussion to a few points. He agrees that taxes on manufactured commodities raise the price, generally by a sum exceeding the amount of the tax. But he takes issue with Ricardo in regard to a tax on agricultural produce. Senior maintains that, while the immediate effect of such a land tax is to raise prices, its ultimate effect is to diminish both the production and the consumption of raw produce, and therefore to leave its price unaffected. Tithes will, therefore, not be shifted to the consumers.[2]

John Stuart Mill keeps, in the main lines, to the arguments of his predecessors. He assumes perfectly free competition and the complete transferability of capital, and on these assumptions builds up his whole superstructure. He follows Ricardo, except in three points. In the first place, he accepts Senior's emendation of the doctrine of tithes, that in the long run the incidence is on the landowner, and not on the consumer. Secondly, he accepts the view of his father as to the incidence of a tax on wages. Thirdly, he analyzes more closely the incidence of taxes on exports and imports.[3]

McCulloch displays independence in only one point. A special tax on profits, he contends, will not necessarily raise prices, as Ricardo thought: instead of being shifted to the

[1] *Elements of Political Economy.* By James Mill, Esq. 3d ed., 1844, chap. iv, sec. v–xiii, pp. 248–292. In the first ed. of 1821 this qualification is not found. *Cf.* pp. 206–208.

[2] *Political Economy.* By Nassau William Senior. London, 1835; 6th ed., 1872, pp. 120–124.

[3] *Principles of Political Economy.* By John Stuart Mill. London, 1847, book v, chap. iv, § 4; chap. iii, § 4; and chap. iv, § 6.

consumer, it may lead to a reduction of cost. McCulloch points out that the producer will endeavor to meet the pressure of the tax and to defeat it by greater skill and industry, by increased facility of production, or by a saving of expense, so that the tax will not continue to fall on him. Furthermore, it will not fall on the consumer.[1] In reality, however, this doctrine explains, not any process of shifting, but what was termed in the introduction the "transformation" of taxation; which is a very different thing. This idea of transformation may accordingly be said to have been introduced into scientific discussion by McCulloch.

So far as a tax on wages is concerned, McCulloch accepts the general proposition of Ricardo, but thinks that the shifting of the tax to profits may be true only in the long run. There is a possibility that in the interim the laborers' standard of life may be lowered. The real injury, however, entailed on laborers by taxes on wages consists in the fact that "by falling on profits they tend to diminish the power to accumulate capital" and thus incidentally to lessen the wages-fund.[2] It is true that McCulloch does not favor taxes on wages, but he is not opposed to taxes on the necessaries of life, because according to his general doctrine "a tax on any article consumed by them, provided it be not excessive, never fails to make them more industrious,"[3] or, as he puts it in another plan, "more thrifty and less improvident in entering into matrimonial connexions."[4] The misery of the poor, according to McCulloch, is due not to the taxes on articles of necessity, but to their "want of providence and the dissipated habits that are so widely spread."[5]

[1] *A Treatise on the Principles and Practical Influence of Taxation and the Funding System.* By J. R. McCulloch. London, 1845; 3d ed., 1863, p. 72.

[2] *Op. cit.*, p. 107. [3] *Ibid.*, p. 92. [4] *Ibid.*, p. 96.

[5] *Ibid.*, p. 98. In his original article in the *Edinburgh Review* for January, 1820, pp. 161–162, McCulloch pointed out the possibility of the laborer being injuriously affected by a tax on wages or on necessaries. But when he says that the Ricardian doctrine "must be received with very great modifications," he refers not to the ultimate results, but only to the interval between the imposition of the tax and the consequent changes in population. "A slow and gradual increase of taxation,"

The treatment of the subject by Fawcett is remarkable, first, for the exaggeration of some of the extreme statements of the older economists, — as, for example, the contention that a tax on commodities raises prices far beyond the amount of the tax and, secondly, for the somewhat vague ideas on the incidence of local taxation.[1] As both these points will be fully treated later, we may omit them here.

An interesting criticism of the older theories is to be found in the work of Cliffe-Leslie. This able writer pointed out that the older conclusions were frequently too rigid. "The theoretical canons commonly applied to determine the incidence of taxes," said he, "are often misleading. They furnish us simply with inferences from ideal 'average,' or 'natural,' rates of wages and profit, respecting the 'tendencies' of taxes 'in the long run' and in the absence of disturbing causes." But taxes are paid immediately, under the real conditions of life, and "out of the actual wages, or profits, or other funds of individuals, not out of hypotheses or abstractions in the minds of economists."[2] Cliffe-Leslie called attention to the effects of economic friction in neutralizing the working of supposed immutable laws, and in producing practical effects sometimes the very reverse of those assumed. He confined his arguments, however, to a few taxes; and his own constructive work is not very elaborate. His special doctrines will be noticed below.

he tells us, "by adding to the efficacy of the principle of moral restraint has a tendency to raise the rate of wages, and consequently to throw the burdens from the shoulders of the laborer to those of the employer." Moreover, as the extracts in the text show, McCulloch later on came more and more to emphasize the beneficial, rather than the injurious, consequences of taxes on necessaries. I can therefore not quite agree with Professor Hollander when he says (*Letters of Ricardo to McCulloch*, 1895, p. 60) that I "have hardly done him [McCulloch] justice in this connection."

[1] *Manual of Political Economy*. By the Rt. Hon. Henry Fawcett. London, 1863; 6th ed., 1883, esp. pp. 551 and 613.

[2] "The Incidence of Imperial and Local Taxation on the Working Classes." By Thomas Edward Cliffe-Leslie. In his *Essays in Political and Moral Philosophy*, London, 1879; 2d ed. under the title *Essays in Political Economy*, London, 1888, pp. 388, 389.

A more recent treatment of the subject is to be found in the two general treatises on the science of finance by Professor Bastable and Professor Graziani, both of them published since the first edition of this work. Professor Bastable takes a more realistic view of the problem than many of his English predecessors. He not only devotes a chapter to the general discussion,[1] but appends some interesting, though brief, observations on the incidence of particular taxes. Much the same may be said of the treatment of the subject by Professor Graziani.[2] The views of both writers, which will be

[1] *Public Finance.* By C. F. Bastable. London, 1892; 3d ed., 1903, book iii, chap. v: "The Shifting and Incidence of Taxation."

[2] *Istituzioni di Scienza delle Finanze.* Da Augusto Graziani. Torino, 1897; 2d ed., 190, libro v, capit. iv: "La Repercussione delle Imposte."

Since the second edition of this book was published three works on the general subject have appeared. M. Ch. de Lauwereyns de Roosendaele, a young lawyer of Lille, France, published in 1907 a book entitled, *La Répercussion de l'Impôt.*" Paris, 445 pp. This work, which is evidently a doctor's dissertation, is in its historical part (which constitutes three-quarters of the whole) a faithful reproduction of my book. The author acknowledges his obligations in the preface and in various footnotes. The positive part calls for no especial mention. On the other hand, in the same year Mr. Lawson Purdy, then secretary of the New York Tax Reform Association, and now (1909) at the head of the New York City Board of Taxes and Assessments, issued an admirable little tract of thirty-nine pages on *The Burdens of Local Taxation and Who Bears Them* (Public Policy Publishing Co., Chicago). In this work each of the constituent elements of the general property tax is considered in turn. The conclusions are in harmony with those expressed in this volume. Finally, in 1909 Fabrizio Natoli, a privat-docent in Palermo, published his *Studi su gli Effetti Economici dell' Imposta,* Florence, 109 pp. The first part of this, which is an admirable discussion primarily of nomenclature, has been noticed above in the Introduction. The second part deals chiefly with the shifting and incidence of a tax on money, a problem which is to-day of no practical importance.

The Academy of Moral and Political Science in France offered the Rossi prize in 1887 to the best work on the shifting of taxation. The prize was awarded to Albert Delatour. M. Léon Say, secretary of the commission of award, stated that "it would soon be published." Only one short chapter, however, has appeared, and this is devoted entirely to the question of the incidence of a tax on interest. See the article by Delatour entitled "L'Incidence des Impôts sur l'Interêt des Capitaux" in *Annales de l'Ecole libre des Sciences Politiques,* vol. 3, 1888, pp. 357–367.

Professor Jacopo Tivaroni of Cremona has also recently published an excellent compendium of seventy-eight pages on the subject under the title *Traslazione ed*

considered hereafter, are largely in harmony with those contained in the second part of this investigation.[1]

Incidenza delle Imposte, Elementi della Teoria, Verona, 1905. This monograph also accepts most of the conclusions reached in the present work.

[1] The most recent discussion of the general topic is concerned with the problem of capitalization. Some implications of the doctrine are discussed in a suggestive way by Professor Thomas S. Adams in "Tax Exemption through Tax Capitalization" in *The American Economic Review,* vi (1916), 271–287. A reply to this by the present writer appeared under the same title, *ibid.*, vi, 790–807. The point at issue was further discussed in two articles with the same title in the *Bulletin of the National Tax Association,* ii (1916–1917), Professor H. G. Hayes (pp. 69–73) siding with Professor Adams, while Professor R. M. Haig (pp. 198–200) espoused the other side. *Cf.* also H. J. Davenport, "Theoretical issues in the single tax" in *The American Economic Review,* vii, 26–28. The entire controversy was reviewed by Professor Benvenuto Griziotti in his *Teoria dell' ammortamento delle imposte e sue applicazioni,* 1918, who upholds the present writer's position in the following statement: "ora a me sembra che abbia ragione il Seligman, nella replica alle critiche dell' Adams, di osservare che questi, attraverso incertezze di pensiero e contraddizioni, viene ad ammettere quanto precisamente sostengono il Seligman e con lui i principali difensori della teoria dell' ammortamento" (pp. 21–22).

CHAPTER VI

The Negative or Agnostic Theory

The doctrine that it is impossible to form any general conclusions about the subject of shifting scarcely seems to merit a place in the list of theories of incidence. Yet, as this is an opinion not infrequently met with among practical men, it will be well to give it passing attention.

The ablest expounder of this theory is Adolf Held. His discussion of incidence is based on a denial of cost of production as a condition of normal profits.[1] Held follows Schäffle in generalizing the rent conception, and is, to this extent, a forerunner of the recent English and American writers who adopt the same idea. This conception, applied to profits, results in the theory of greatest or marginal cost, and in the explanation of profits as the difference between marginal cost and market price. Held, however, does not draw the correct conclusions from his theory. He was an acute thinker, and a man of the noblest ideals; but he became so imbued with the idea that all of the old political economy was worthless that his strictures are as often false as true. Like so many of the younger Germans, he was stronger in criticism than in construction; and his own positive contributions to pure theory are not very profound. His whole treatment rests on a misunderstanding, which sometimes almost seems to be a wilful perversion, of the doctrine of cost of production. It would not repay us to discuss all his points in detail, as even the Germans themselves, who were at one time deeply impressed with his views, have now repudiated his extreme

[1] "Zur Lehre von der Ueberwälzung der Steuern." Von Adolf Held. — In *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, 1868, pp. 422–495.

doctrines. His conclusions are chiefly negative, and may be summed up in the confession that we can know nothing about the whole subject of incidence.[1] From Held, therefore, we learn nothing positive. His conclusions, moreover, have been accepted only by writers of such little standing that any further consideration of the agnostic theory is unnecessary.

Somewhat the same position has been adopted by a few English writers. Thus, in a recent report, Sir Edward Hamilton and Sir G. Murray declare that the problem is "insoluble," and that "incidence must be mainly a matter of conjecture and speculation."[2]

So also Lord Avebury seems to hold the same opinion when he states that "as to the attempts to determine with any scientific precision the exact incidence either of rates or taxes, the only answer, says Professor Nicholson, 'is that an answer is impossible.'"[3]

[1] *Cf.*, as a sample, the following conclusion: "Ueber die Abwälzung der Kapitalzinssteuer lässt sich also gar nichts sagen, sie lässt sich nicht einmal allgemein leugnen." — *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, p. 481.

[2] "The equitable distribution of the burden of taxation involves the insoluble problem of incidence." — Report by Sir Edward Hamilton and Sir George Murray, in *Royal Commission on Local Taxation, Final Report*, 1901 [Cd. 38], p. 109.

[3] "Inaugural Address on Local and Imperial Burdens," by Lord Avebury. In *Journal of the Royal Statistical Society*, vol. 64 (1901), p. 558. — Lord Avebury is mistaken in attributing this opinion to Professor Nicholson, who, in the passage quoted, limited his observation to the incidence of import and export duties. Even as to these, however, Professor Nicholson subsequently modified his opinion. *Cf.* his *Principles of Political Economy*, iii (1901), pp. 342–349. — The quotations which Lord Avebury makes from my book refer expressly only to the early pre-scientific theories — a fact which Lord Avebury neglects to mention. *Cf.* also in general, on this point, Bastable, *Public Finance*, 3d ed. (1903), p. 371.

CHAPTER VII

The Socialistic Theory

What is here termed the socialistic theory of incidence really ought not to be put on a level with the general theories discussed in the earlier chapters; for it is a doctrine that is confessedly partial in character. But its application is so general, and its propagation among large classes influenced by the socialistic leaders is so earnest, that it deserves a few words.

The theory was developed primarily by the great agitator Lassalle. Lassalle devotes himself especially to the consideration of the laborer's interests. He terms indirect taxes all those which are not assessed directly on individual income or property, including, therefore, under this head not only taxes on consumption, but also land and business taxes. All these indirect taxes — in Germany, for instance — fall ultimately, says Lassalle, on the poorer classes of society; for, since the laborer has not sunk quite so low as the Irish workman or the Indian ryot, a little more can be taken from his wages before reducing him to starvation. Adam Smith and Ricardo, who were correct enough in their theory of the incidence of taxes on produce, he continues, are here mistaken; since it is a scientific fact that wages, as compared with other commodities, are always the last to rise in price. It is therefore the laborer who bears all the so-called indirect taxes — that is, the greater part of all taxes.[1]

This exaggerated doctrine has been accepted not only by most of the socialistic theorists, but also by popular writers

[1] *Die indirekte Steuer und die Lage der arbeitenden Klassen.* By Ferdinand Lassalle. Zurich, 1863, pp. 9, 36, 41, etc.

who are very far removed from socialism. Mr. Thomas G. Shearman, for instance, while indeed limiting the definition of indirect taxes more narrowly than Lassalle, is equally extravagant in his statement of their incidence and effects.[1] The more modern and more scientific view, on the other hand, is that there is nothing inherently bad about an indirect tax, just as there is nothing inherently good about a direct tax. It depends entirely upon what kind of a direct or indirect tax it is. There are some good indirect taxes which do not fall on the laborer at all; just as there are some bad direct taxes which, as we shall see later, do fall on the laborer.

[1] *Natural Taxation. An Inquiry into the Practicability, Justice and Effects of a Scientific and Natural Method of Taxation.* By Thomas G. Shearman. New York, 1895. See esp. chap. ii, "Crooked Taxation."

CHAPTER VIII

The Quantitative or Mathematical Theory

The authors who have in some respects done the best work in the study of the incidence of taxation are precisely those who have until recently been largely neglected.[1] They may be called, for lack of a better name, the quantitative or mathematical school. They are united not so much by similarity of conclusions as by identity of method.

Of these the earliest and most suggestive is Cournot. He started out from the assumption that the whole theory of incidence is an integral and necessary part of the general theory of value. In his first and most profound work,[2] in which he laid down many of the general principles which to-day form essential parts of the newer doctrines in pure economics, he attempted to apply his theory of value to the study of taxation. Cournot studied commodities under the regime of monopoly and of competition respectively, and employed the methods of differential calculus to ascertain what influence an increase in the supply price of any commodity would have on the producer as well as on the consumer. He analyzed the laws of constant, increasing and diminishing returns in their relations to this influence, and he came to some important conclusions which will be discussed in the second part of this work.

While it is undeniably a relief to read the clear-cut and

[1] Not one of the recent German or French elaborate works on finance refers to a single member of this school. Kaizl and Falck also neglect them completely.

[2] *Recherches sur les Principes Mathématiques de la Théorie des Richesses.* Par Augustin Cournot. Paris, 1838, chaps. vi and viii. An English translation was published in 1898 in Professor Ashley's *Series of Economic Classics*, under the title of *Researches into the Mathematical Principles of the Theory of Wealth.*

precise doctrines of Cournot, as compared with the vague and misty generalizations of many writers of the eclectic school, his treatment of incidence is not entirely adequate. His whole study is practically a discussion of the incidence of taxes on commodities. He fails to remember that there are other taxes besides those on commodities and on profits; and he ignores the fact that to regard a tax as raising the normal supply price or the cost of production does not exhaust the possibilities of the case. It is true, indeed, that in a later work [1] he attempts to discuss the incidence of taxation without the use of mathematics, and to extend the discussion to other taxes. But this attempt is not always successful. In certain cases — for example, the tax on buildings — his views are even erroneous. Moreover, whole classes of taxes, like that on wages, are omitted; and no attempt is made to lay down any general conclusions. So far as the study of the taxation of commodities is concerned, however, Cournot's book has scarcely been surpassed.

Some of Cournot's ideas were developed by another French mathematician, Fauveau. He added practically nothing, however, except a series of elaborate mathematical formulæ, and is to be noticed mainly because of his energetic opposition to the optimistic theory. "The diffusion of taxes," says he, "cannot render taxes proportional any more than the diffusion of light makes a room equally illuminated in every part, whatever be the position of the candle." [2] Fauveau concludes rather sadly that it is quite as easy for an originally equal tax to become unequal in its operation as for an originally unequal tax to become equal.

Many years later an attempt of a similar nature was made by an English mathematician, Fleeming Jenkin. Jenkin's essay deals chiefly with what he calls taxes on commodities.

[1] *Principes de la Théorie des Richesses.* Paris, 1863, book iii, chap. viii.

[2] "La diffusion de l'impôt, nous parait-il, ne peut pas le rendre en définitive proportionel pas plus que la diffusion de la lumière ne fait qu'une chambre est éclaircie également en tous ses points quel que soit l'endroit de cette chambre où l'on a placé une bougie." — *Considérations Mathématiques sur la Théorie de l'Impôt.* Par G. Fauveau. Paris, 1864, p. 58.

Although he evidently knew nothing of Cournot, Jenkin was among the first of the Englishmen to apply the mathematical method to economic problems. His original contribution consisted in the use of diagrams based on a combination of the demand curve and the supply curve. He concluded that "the ratio in which a tax on commodities falls on sellers and buyers is simply the ratio of the diminution of price obtained by the sellers to the increase of price paid by the buyers."[1] In his treatment of taxes on land and on houses, however, Jenkin failed to make the qualifications which alone can give the results practically true in every-day life. Moreover, he neglected other taxes, and made almost no attempt to give any general laws of incidence. Jenkin's remarks on the special point of the influence of taxes on cost, however, are suggestive, and will be considered later.

About a decade later, a young Italian economist, who has since become well and favorably known to English readers, Professor Pantaleoni, devoted a whole volume to the study of the incidence of taxation.[2] He, also, was ignorant of the work of Cournot, but attempted to base his theory on the doctrine of cost of production worked out on arithmetical lines. Pantaleoni devoted over half of his work to what is really a part of pure economic theory — the doctrine of value — and then proceeded to discuss the incidence of some of the chief separate taxes. His study is the most comprehensive one yet published on the general subject, although — strange to say — it has, until very recently, received no consideration outside of Italy itself. While there is a great deal of acute and original thought in the monograph, the work suffers from the fact that its doctrine of incidence is largely

[1] Fleeming Jenkin, "On the Principles which Regulate the Incidence of Taxes," in *Proceedings of the Royal Society of Edinburgh*, Session 1871–1872, pp. 618–631. *Cf.* Grant's *Recess Studies*, 1870, pp. 151–185, for his "Supply and Demand schedule." The essay on taxation was reprinted in *Papers, Literary, Scientific, &c.*, by the late Fleeming Jenkin. Edited by Sidney Colvin and J. A. Ewing. London, 1887, ii, pp. 107–122.

[2] *Teoria della Traslazione dei Tributi. Definizione, Dinamica e Ubiquità della Traslazione.* Da Maffeo Pantaleoni. Rome, 1882.

based upon economic theories which are open to question. Thus, the value of the author's treatment of the tax on profits is somewhat impaired by the dubious doctrine of profits that he espouses. Again, his treatment of the land tax and of the house tax is neither exact nor correct. It may, in fact, be affirmed that some of the doctrines upheld in the work no longer represent the views of the author.[1] We omit in this place a detailed statement of the special doctrines, as we shall have occasion to revert to them constantly in the following pages. Notwithstanding some imperfections, Professor Pantaleoni's work contains, on the whole, the best existing treatment of the incidence of taxation, as a matter of pure theory.

Comparatively few of the recent continental writers belonging to the mathematical school have attempted to make any application of this method to the theory of the incidence of taxation. As regards the Austrian writers, who have developed the psychological, rather than the mathematical, method in economics, and who have applied the newer theories of value to various problems of taxation, neither Menger, Wieser, Böhm-Bawerk nor Sax has made use of these newer theories to explain the doctrines of incidence. On the other hand, Auspitz and Lieben in Austria, and Launhardt in Germany, apply some of their diagrams of the supply and demand schedules to questions of taxation.[2] Among the modern continental writers of the mathematical school, however, the French, or rather Swiss, economist Walras stands preëminent. When he discusses the theory of taxes on monopolies, he refers to the works of Cournot and Dupuit.[3] But his own

[1] In answer to a letter from the present writer stating that he did not agree with several of the doctrines laid down in the work, Professor Pantaleoni intimated that his present views differ in some respects from those expressed in the book.

[2] Auspitz und Lieben, *Untersuchungen über die Theorie des Preises*, 1889; W. Launhardt, *Mathematische Begründung der Volkswirthschaftslehre*, 1885.

[3] Dupuit was one of the first to attempt to illustrate the principles of marginal utility and of monopoly price by mathematical methods. See his articles "De la mesure de l'utilité des travaux publics," in the *Annales des Ponts et Chausées*, 2d series, vol. viii, 1844; and "De l'influence des péages sur l'utilité des voies de communication," *Ibid.*, 1849.

treatment of the whole subject results in conclusions that seem a little too simple. According to Walras, a tax on land, owing to the theory of the rent charge, rests only on the original owners. A tax on wages rests on the wage-earner, because the theory of capitalization is not applicable here. A tax on what he calls artificial capital or interest is nothing but an indirect tax on consumption, because it is inevitably shifted. Taxation can really hit only "natural wealth," that is, either agricultural rent or wages.[1] In a more recent work, Professor Walras recurs to his general theory of taxation, but has only a little to say about incidence, further than to point out the impossibility of the equal-diffusion theory.[2]

We come now to a group of economists who have advanced some new views during the past few years. One of the most original of these recent efforts has been made by an acute Swedish writer — Knut Wicksell.[3] He complains that the ordinary theory of incidence deals only with the relations of the producer to the consumer; and objects that, in the many cases where the tax is supposed to rest upon the producer, this theory does not go far enough, since production is a process involving the coöperation of several factors — land, labor and capital. The real difficulty, therefore, says Dr. Wicksell, is to trace the effect of a tax on these various classes of society, — the farmers, the capitalists and the laborers. In order to solve this problem, he accepts the theory of Böhm-Bawerk as to the importance of the comparative period of investment.[4] This theory, as is well known, states that the longer the comparative production-period or period of investment of capital, the greater its productivity. Since the application of labor amounts to a lengthening of this

[1] *Théorie Critique de l'Impôt.* Par Léon Walras. Paris, 1861, pp. 31–57. In his *Eléments d'Économie Politique Pure,* M. Walras seems to have altered his opinion, but still clings to the rent-charge theory. See the 3d ed., 1896, pp. 446–460.

[2] *Études d'Économie Sociale.* Par Léon Walras. Paris, 1896, p. 445.

[3] *Finanztheoretische Untersuchungen nebst Darstellung und Kritik des Steuerwesens Schwedens.* Von Knut Wicksell. Jena, 1896.

[4] *Ibid.,* p. 31.

period of investment, the productivity of labor will increase with the extent to which it is applied in long periods of production. Starting out from this premise, Dr. Wicksell seeks to reconstruct the theory of incidence, by endeavoring to measure the effects of a tax upon the elements that contribute to a lengthening or a shortening of the production period.[1] His conclusions, however, although based on much keen and attractive analysis, are vague. In order to simplify his processes, he posits all kinds of hypotheses which are not true in actual life, and seeks to bolster up his conclusions by a detailed apparatus of mathematical reasoning. When he comes to the conditions of real life, the complications become so great that his preliminary hypotheses turn out to be of little use, and the conclusions vanish.[2] Nevertheless, as an intimation of the kind of difficulties that beset those who attempt to trace the ultimate effects rather than the immediate incidence of certain kinds of taxes, Dr. Wicksell's book is worthy of study. Whether the application of his new principle will really solve any present problems is still to be ascertained.

Among the most recent Italian writers of the mathematical school, reference may be made to Professor Conigliani. He devotes himself primarily to the wider subject of the general effects of taxation.[3] So far as he speaks of shifting and incidence, he attempts to give only the "abstract, general theory," apart from its application to any existing systems of taxes, and apart from any "exceptional, transitory or irregular" phenomena. The result of such a method of study, based on the recent Austrian theories of subjective value, is

[1] *Finanztheoretische Untersuchungen nebst Darstellung und Kritik des Steuerwesens Schwedens*, p. 37.

[2] Dr. Wicksell himself states: "Dies mag nun so klingen als ob die praktische Lösung der Frage für immer unmöglich sei." He thinks that an escape from this conclusion may be found in the fact that we really need only an approximate answer. But he naïvely adds: "Allerdings fehlen sogar für eine solche approximative Lösung die nötigen Data so gut wie vollständig." — *Ibid.*, p. 56.

[3] *Teoria generale degli Effetti Economici delle Imposte. Saggio di Economia Pura.* Del Dottor Carlo A. Conigliani. Milan, 1890.

partly a series of truisms — in which we cannot, even with the best of will, discern much advance in theory — and partly a statement of tendencies couched in such general terms as to be of little use in the elucidation of practical problems. We include Conigliani under the mathematical school only because he himself professes to be among its followers. As an example of his method, we give his final conclusion: "A tax of given intensity and extension falls with the less intensity and extension on individual economies, and produces a less unequal effect on economic society, in proportion as society is more developed. The incidence, when it does not have a considerable extension or intensity, assumes the less easily the character of a change in activity, in proportion as society is more advanced. Finally the change in consumption will take place with greater disturbance of the equilibrium in the degree of the satisfaction of wants, and therefore with less change in the internal arrangement of individual economy, in proportion as the social environment in which these changes of taxation take place is more advanced."[1] And this, Conigliani tells us, "completely exhausts the general theoretic problem of the effects of taxation."

It is only fair to Professor Conigliani to state that in another more recent work[2] he has shown his ability to grapple with the detailed problems of shifting. In this admirable book — which, like so many of the recent works by Italian writers, fairly staggers the reader with its wealth of material and evidences of wide reading — Professor Conigli-

[1] "Un' imposta di data intensità ed estensione, è tanto meno intensamente ed estesamente incisa su alcune economie, e lo è tanto meno disegualmente sulla società economica complessiva quanto più questa è evoluta. L' incidenza poi, quando essa non abbia una considerevole estensione ed intensità, assume tanto meno facilmente il carattere di un mutamento nell' attività, quanto più la società é progredita. Infine il mutamento nel consumo si avvera con tanto maggiore violazione dell' equilibrio dei gradi di soddisfazione dei bisogni, e quindi con tanto minore alterazione dell' ordinamento interno dell' economia individuale, quanto più progredito è l' ambiente sociale, in cui si immagini il mutamento di imposta." — *Ibid.*, p. 276.

[2] *La Reforma delle Leggi sui Tributi Locali.* Da C. A. Conigliani. Modena, 1898, 751 pp.

ani comes to close quarters with some of the difficult questions of incidence. But here he abandons the mathematical method, and treats the problem very much from the same point of view as his compatriot Graziani.[1] The chief Italian writer to follow the lead of Cournot is Major Barone, who substitutes diagrams for algebraic formulæ. He has published a succinct but very suggestive essay[2] on some fundamental theorems in the pure theory of taxation, working out in mathematical form some of the points referred to in the following pages.

Among recent English writers, we turn naturally to the two leaders of economic thought, Professors Marshall and Edgeworth. The former has called attention to the connection between the doctrine of incidence and the general law of value. Although he has reserved the fuller study of the shifting of taxation for the second volume of his great work, his incidental treatment of the topic has already enriched the discussion with some profound remarks and some interesting diagrams.[3]

Professor Edgeworth has treated the general subject in a series of recent articles.[4] He discusses the abstract theory with all the force of reasoning, the nicety of distinction and the acuteness of criticism to which the readers of his other works have become accustomed. His presentation discloses, perhaps even better than that of Cournot, the strong — and also the weak — points of the mathematical method. While we shall often have occasion to refer to the substance of Professor Edgeworth's remarks hereafter, this is a convenient place to say a word about the mathematical method in general.

To the reader who understands the higher mathematics,

[1] See above, p. 199.

[2] "Di alcuni Teoremi Fondamentali per la Teoria Matematica dell' Imposta." Da Enrico Barone. In the *Giornale degli Economisti*, v (1894), pp. 201–210. See also his "La Traslazione delle imposte" in "Studi di economia finanziaria," *ibid.*, xlv (1912), pp. 1 *et seq.*

[3] *Principles of Economics*. 5th ed., 1907, book v, chaps. xiii and xiv.

[4] "The Pure Theory of Taxation." In *Economic Journal*, vii, pp. 46–70, 226–238. *Cf.* the other articles mentioned below in pt. ii, chaps. iii and v.

the hypothetical principles of the influence of tax on price can be illustrated with a degree of refined precision that is eminently satisfactory. But this advantage is occasionally secured at a heavy cost. While the intricate algebraic formulæ may be worked out with perfect exactitude, the slightest flaw in a single symbol may invalidate the whole conclusion. Furthermore, the mathematical study of the pure theory often assumes a simplicity of condition which does not actually exist; it purposely neglects the all-important element of friction, and constructs hypotheses irrespective of their agreement with the facts of actual life. If, as sometimes happens, these hypothetical results are applied to the conditions of the market-place, the results are likely to be unreal. Within narrow limits, the mathematical treatment of incidence is exceedingly valuable, but except where diagrams are employed, it is apt, perhaps, to be of greater value to the writer himself than to the reader. In fact, the chief advantage of the mathematical method is seen in the use of diagrams, where an intricate point which involves the simultaneous consideration of several causes can be illustrated with greater brevity and clearness than in any other way. But when we proceed from diagrams to the higher algebra, the use of the mathematical method sometimes leads to refined calculations of more importance to the mathematician than to the economist, and of little perceptible use in solving any practical economic problems. It may even be doubted whether the mathematical method has independently discovered any important principle susceptible of practical application that could not have been also expressed in every-day language. That it has not preserved its votaries from error is evident from Cournot's unhappy treatment of the mathematics of international value. That it sometimes leads to results which are likely to divorce still more the economics of the closet from the economics of the market-place may be illustrated by an argument of Mr. Edgeworth himself.[1]

[1] See the extended mathematical proof (in the *Economic Journal*, vii, pp. 230–232) of the proposition that a tax on first-class railroad tickets may reduce

It has usually happened, however, that most of the mathematical economists have been at the same time distinguished thinkers, who have been able, as in the case of Professor Edgeworth, not so much because of their mathematics[1] as because of their power of keen analysis, to illumine many a dark corner of pure theory. It is not surprising, then, that to the mathematical economists we owe some of the ablest contributions to the subject of the incidence of taxation.

Our long and tedious task has come to a close. The subject of the incidence of taxation, as we have seen, was one of the earliest to engage the attention of writers on economic questions; and because of its difficulty, as well as of its importance, it has remained a favorite topic for modern economists. The writers prior to Adam Smith, with a few distinguished exceptions, considered only a single phase of the larger problem, and attempted to connect their discussion with some pending measures of actual legislation. The history of their views is of interest primarily as containing the germs of future doctrines. Beginning, however, with the Physiocrats and Adam Smith, we meet broader principles based on fundamental theories of the new economic science. The Physiocrats spoiled their doctrine of incidence by accepting certain peculiar views on the nature of wealth and the

(not increase) the price of the tickets of *all* classes. The mathematics which can show that the result of a tax is to cheapen the untaxed as well as the taxed commodities will surely be a grateful boon to the perplexed and weary secretaries of the treasury and ministers of finance throughout the world!

[1] The average man will agree with Jowett, who writes to a correspondent: "I hope that you will not . . . write anything that is not perfectly intelligible and which cannot be expressed in words without symbols. You remember that I was always an enemy to the mathematical formulæ. (You) will reply that I do not understand them, which is very true. But . . . I think that all attempts of any kind to express ideas by numbers and figures have failed and will always fail because they are not in *pari materia* — things indefinite cannot be measured by things definite, though they may be sometimes illustrated by them." — *The Life and Letters of Benjamin Jowett.* By Abbott and Campbell. 1897, ii, pp. 315, 316. For the other view, see Edgeworth, *Mathematical Physics*, 1881; and the same author's address "On the Application of Mathematics to Political Economy," in the *Journal of the Royal Statistical Society*, lii, part i, pp. 538–576.

principles of production. Adam Smith and Ricardo here, as almost everywhere else, disclosed the real starting-point of the inquiry, and gave the true direction to future investigation. Their doctrines need, indeed, to be rounded out, and in part corrected; but this is true only to the extent that their theories of economics in general are in need of the revision that they have received in recent times.

The acceptance of the doctrines of Adam Smith and Ricardo on the subject of incidence was retarded by two peculiar theories which long claimed the attention of students. The equal-diffusion theory, as we have seen, was developed primarily by French writers, although it soon spread to other countries, and at one time appeared to be in almost complete possession of the field. It owed its popularity chiefly to its seeming simplicity; and it was welcomed by the conservatives as a defence of the existing social order. But a few acute thinkers, as we now know, recognized that the theory was susceptible of a pessimistic, as well as of an optimistic, interpretation; and with the new weapon of attack now given to the radicals, the popularity of the doctrine waned. Its total disappearance, however, was due to the fact that the essential weakness of the premises was gradually recognized. The other doctrine which, for a time, engaged attention was the capitalization theory. This was, however, applied primarily to the consideration of the land tax, and never entirely supplanted the older classical theories in general.

The great mass of writers with whose views we have become acquainted continued to discuss the subject in a more or less conventional manner. Some of them, as the members of the eclectic school, made certain valuable suggestions; and we can notice almost from decade to decade an increase in the breadth of view and in the attention to points neglected by their predecessors. But the new theories of distribution had not yet been worked out, and the results, therefore, were only partly satisfactory. Two minor theories that next presented themselves were the rather de-

spairing doctrine of those who regarded the problem as too intricate for any satisfactory solution, and the more self-satisfied theory of those reformers who considered that they had discovered the real social bearing of the doctrine of incidence. A real and lasting advance, however, was made by the writers who addressed themselves primarily to the quantitative relations of pure theory and who, in part at least, based their conclusions on mathematical processes. But here again the very welcome and timely insistence on the general principles of pure theory was attended with some drawbacks. On the one hand, many of the writers seem to have considered pure theory as synonymous with the theory of normal law under static conditions and thus neglected the element of friction or the working out of economic law under dynamic conditions. In the second place, many authors contented themselves with stating these normal laws of incidence in general, with only a passing illustration here and there. Little attempt was made to take up the most important existing taxes in turn, and to trace their incidence in detail.

There still remains, then, a task to be accomplished. Not that a complete revolution or reconstruction of the doctrine of shifting is necessary or possible. Much — nay, by far the greater part — of the doctrine has come down to us in a systematic development from the original theories of the founders; but here and there excrescences are to be lopped off, gaps are to be filled. The newer theories of distribution require in part a recasting of the doctrine of shifting; while a due regard to its practical importance justifies a restatement of the whole subject, which, while by no means inattentive to the purely theoretic aspects of the topic, shall endeavor continually to bear in mind their application to the problems of actual life.

PART II

THE DOCTRINE OF INCIDENCE

NOTE TO THE FOURTH EDITION

Were this a study of the general effects of taxation, it would have been proper to point out that taxation, like other things, may affect the general level of prices and engender changes in capital values. The chief way in which this is accomplished is through the rate of interest, for capital values are the capitalization of income values at a given rate of interest. If a tax should retard accumulation, diminish savings or investment, or deplete the fund of capital, the rate of interest will rise and existing securities will fall in value. The same or contrary results would ensue according as the taxes are spent less or more economically than would be the case if the funds were left in private hands. Such changes in capital value, however, are the results of a more or less slow process, to be distinguished from the capitalization and amortization discussed in pp. 174 and 221 of the text. The first writer to call attention to this aspect of the effects of taxation on changes in capital values was Professor Luigi Einaudi in a note on pp. 287–289 of vol. 43 (1912) of the *Memorie della Reale Accademia delle Scienze di Torino*. In 1918 Professor Benvenuto Griziotti published in the *Giornale degli Economisti* a series of articles, reprinted as *Teoria dell' ammortamento delle imposte e sue applicazioni*; and in 1919 Professor Einaudi printed in the Proceedings of the Turin Academy a fuller study of the subject, republished as *Osservazioni critiche intorno alla teoria dell' ammortamento dell' imposta e teoria delle variazioni nei redditi e nei valori capitali susseguenti all' imposta*. While Griziotti includes all the phenomena under the head of amortization, Einaudi concedes (p. 61) that they are sufficiently disparate to justify the retention of the terms capitalization and amortization for the classic phenomenon. He suggests the application of the term "variations in capital values" to the other set.

CHAPTER I

General Principles

The problem of the shifting of taxation is primarily a question of prices. To solve it is to discover whether, and to what extent, the imposition of a tax effects changes in the revenues and the expenses of individuals; in other words, to ascertain which of the two parties to every economic transaction — the buyer and the seller — bears the burden of the tax. This is obviously not the same as saying that we are dealing only with the relations between the producer and consumer. The vendor may, indeed, be a producer; but he may also be an owner who has acquired the commodity without producing it. Whatever these relations may be, the essence of the inquiry is: Are prices raised, and if so, to what extent are they raised? Whether we deal with the prices of consumable commodities, of capital, or of labor, this is always the nature of the problem.

It is readily perceived, therefore, that the theory of the shifting of taxation is a part of the wider theory of value, and that a comprehension of the facts of incidence depends on an application of these laws of value. But the laws of value, as is now well recognized, deal primarily with the more or less subtle changes caused in the supply of, or in the demand for, commodities. Even the cost of production, which plays so fundamental a part in economic progress, affects price through the medium of changes in the relations of supply and demand. Our concern, then, will be not only to mention those general laws of value which are of especial significance to the subject under discussion, but also to call attention to the varying conditions under which these laws work them-

selves out. In other words, we have to deal not alone with the "pure theory," but also with those phenomena of friction which impede the action of the general laws and are of fundamental importance in any application of the doctrine to the affairs of real life.

If we take the simplest case of a tax imposed on some commodity, the ordinary result may be pictured somewhat as follows: —

The tax must evidently at first be regarded as an increase in the cost of production. For the time being, and until the old stock is exhausted, those who produced before the new tax was imposed are benefited to the extent of the ultimate rise in price. But as soon as this interval has elapsed, all producers are on the same footing. Since the tax is an addition to the cost of producing the article, they will seek to recompense themselves by raising the price. Unless they succeed in this, their profits will be curtailed and the production of the article will diminish. For one of two results must ensue: either producers will gradually transfer their capital to untaxed industries, or, even if the transfer of capital is impossible because it is firmly fixed in the industry, production will be curtailed by the crowding out of those who were previously on the very margin of profitable production, while the tax will prevent the influx of any new capital. In either case, then, in the long run, the supply will decrease; and this diminution, provided the commodity continue to be produced at all, will involve an increase of price. The consumer will, therefore, bear the burden of the tax.

This seems to be a very simple process. Not a few have even supposed that this description exhausts the study of incidence. The extent, however, to which this is actually true, and therefore the extent to which such a tax will be shifted to the consumer, depends on a number of important considerations, inattention to which will vitiate not only any theoretical conclusions as such, but also their application to the facts of every-day life.

In the application of the general law of value to taxation the chief considerations are as follows: —

1. Is the commodity durable or perishable?

2. Is the commodity subject to the law of monopoly or that of competition?

3. Is the tax general or exclusive?

4. Is there complete mobility of capital?

5. Is the demand for the commodity elastic?

6. To what extent do differential advantages of production affect the supply?

7. Is the article supplied at a constant, an increasing or a diminishing cost?

8. Is the tax imposed on margin or on surplus?

9. Is the tax large or small?

10. Is the tax proportional or graduated?

11. Is the commodity a final good or merely an intermediate good?[1]

1. *Is the Commodity Durable or Perishable?*

On this distinction depend the phenomena of what is called the capitalization or the amortization of taxation.

When a special tax is imposed on any one class of commodities to the exclusion of all others, the tax will, under certain conditions, fall entirely on the original owner of the commodity — that is, on the one who owned it before the tax was imposed — and not on the future purchaser; for the tax will be discounted through a depreciation of the capital value of the article by a sum equal to the capitalized value of the tax. For instance, if the ordinary return on investments is five per cent, and if a tax of one per cent is imposed on all railway bonds, the price of these bonds will fall from par to eighty. The new purchaser will really not bear the weight of the tax; for although his net return on each bond of a hundred dollars will be only four dollars, he will still make

[1] *Cf.* Graziani in *La teoria generale della ripercussione delle imposte.* Naples, 1899.

five per cent on his investment. Four per cent of one hundred is the same as five per cent of eighty. In the same way, when unequal taxes are levied on different classes of commodities, the excess of the tax on the overtaxed commodity above the general rate will be capitalized, so as virtually to exempt future owners from this differential burden. The tax, then, will fall on the original owner, whose property will be diminished in value by the capitalized equivalent of the excess of taxation. On the contrary, when a special tax is levied on such commodities at a lower rate than that already imposed on other classes, the deficiency in the tax will be capitalized in a sum which will be added to the value of the property in the hands of the original owner. To use our preceding illustration, let it be assumed that all railway bonds are taxed one per cent and sell at eighty. If the tax on the bonds of a single railway company is for some reason permanently reduced to one-half of one per cent, these particular bonds will rise in price to ninety. In this case the original owner, and not the purchaser, will benefit by the reduction or the remission of taxation, just as in the preceding case the original owner, and not the purchaser, suffered from the tax. Where the value of the commodity diminishes, the term "amortization of taxation" seems suitable; where the value of the commodity increases, the phrase "capitalization of taxation" is preferable. A still better term is the "absorption" of taxation, the tax being absorbed in the lower capital value of the commodity.

The question now arises: Under what conditions will this phenomenon appear? In answering this question due importance must be assigned to the following considerations: —

A. The tax must be an exclusive or an unequal tax.

B. The tax must be levied on a commodity which has a capital value and is capable of having an annual rental value.

C. The tax must be levied on a commodity of so protracted a consumption period that several annual payments are expected to be made.

D. The tax must not be susceptible of being shifted to

the consumer by the fact that the commodity is used in further production.

In the first place, it is clearly necessary to assume inequality of taxation. If there is no excess, there is nothing to be capitalized. The theory applies only to taxes which are exclusive, or which exceed other taxes by a definite amount. Inequality of taxation is the corner-stone of capitalization.

It is important, however, to define inequality. Tax capitalization is a part of the general process of capitalization which operates through the rate of interest. Incomes are always capitalized at a given rate of interest, *i.e.*, the flow of wealth becomes a fund through capitalization at a definite rate. Although at any given time we are justified in speaking of a general rate of interest, different capital goods are capitalized at different interest rates. A 3 % and a 6 % $ 100 bond, for instance, may both sell at par. The 3 % may be called the pure interest; while the extra 3 % in the 6 % bond, which represents risk or a variety of other considerations, may be called, to borrow an insurance term, the loading. Equality of taxation always means an equal burden on the pure return. In the case mentioned of a 6 % bond, the loading is double the pure interest. An income tax of 10 % would reduce the return of the 6 % bond to $ 5.40, taking 30 ¢ from the loading and 30 ¢ from the pure interest, which is thus reduced to $ 2.70. Inasmuch as the return from the 3 % bond is also reduced to $ 2.70, there will be no change in the capital value of either security. But if a property tax of 1 % is imposed on both, causing the returns to fall to $ 5 and $ 2 respectively, the equality in the pure interest rate is impaired. For in the case of the 6 % bond, the loading and the pure interest are each reduced to $ 2.50, whereas in the 3 % bond the pure interest is reduced to $ 2. In order to make the burden equal, the pure interest on the latter bond ought now to be 2½ %. The result will be that, if the 6 % bond still sells at par, the capital value of the 3 % bond will fall to 80, for only in this way will the $ 2 represent a return of 2½ % on the capital. The seemingly equal property tax is

thus really an unequal income tax, and it still remains true that it is the inequality of taxation which causes the capitalization of the tax.[1]

Secondly, the commodity must have a capital value which is susceptible of diminution. This would, for instance, hold true of land; in fact, we have seen that the whole theory arose from a consideration of the land tax.[2] It is equally true, however, of any other commodity whose market value is nothing but the capitalized rental value, the capitalization being fixed at so many years' purchase. But the principle cannot apply to taxes on income in general, or to taxes on wages, or to poll taxes, because in these, and in all similar cases, there is no capital value that is subject to amortization or capitalization.

Thirdly, the commodity in question must be relatively durable in character. This consideration is of such cardinal importance that we have put it at the heading of this whole section. When we speak of a tax, we may mean either a single payment or a more permanent annual payment. If the tax consists of one payment only, as in the case of the federal so-called direct tax during the Civil War, there is no opportunity for capitalization. Again, if the commodity is of so ephemeral a nature that it will be consumed before the tax hits it a second time, there can obviously be no capitalization. This is the case with the so-called indirect taxes on commodities. If a tax is imposed on a barrel of flour, it will ordinarily be shifted to the consumer. But if the commodity is so durable that it may be subject to repeated taxes, and if the taxes are levied at about the same rate from year to year, the anticipated annual payments may be lumped together in such a way as to cause a change in the capital value of the thing taxed. If the commodity yields a perpetual rental or use — as in the case of a piece of land or of a perpetual bond — a special tax or an unequal tax on this land or bond depreciates its

[1] Professor H. G. Hayes fails to appreciate this in his suggestive "The Capitalization of the Land Tax," *Quarterly Journal of Economics*, xxxiv (1920), 377.

[2] As to its application to agricultural land, see *infra*, pp. 269–270.

value by the present rate of a perpetual annuity. The more durable the commodity, the greater the chance of capitalization.

Fourthly, the principle will not apply if the tax is imposed on a commodity which is to be used in further production, where the tax will simply raise the price of the product, instead of lessening the value of the principal or source of the product. Thus an exclusive tax on iron used for making tools may result in an increased price of iron tools and may be shifted onward to the consumer. If by the shifting of a tax we mean its transfer forward to some one else, capitalization is the opposite of shifting. If a tax is shifted onward, it cannot be capitalized; if it is capitalized, it cannot be shifted onward. Capitalization implies a depreciation of the capital value; and this is possible only when the tax rests on the initial possessor — that is, when it is not shifted onward to any one else.

On the other hand, if we extend our conception of shifting to include the process of shifting backward, as well as that of shifting forward, we might call capitalization a kind of shifting. For, as we have just seen, the new purchaser who continues to pay the tax from year to year does not bear it, but in one sense shifts it back upon the initial possessor. He pays the tax indeed; but he has already deducted from the purchase price a sum equal to all the future taxes which he expects to be called upon to pay. The difference between his case, however, and that of a dealer who shifts a tax on commodities back to the producer is that, in the latter case, the tax is levied only once on a commodity destined to immediate consumption, while in the former case a whole series of payments is levied on a durable commodity. In the one case we have the shifting back of a single tax; in the other case we have the throwing back at once of a whole series of taxes. For capitalization implies a change in price equal to the capital value of all anticipated payments. Hence capitalization is properly differentiated from shifting.

With all these qualifications, the absorption of taxation

remains an important topic in the study of incidence. Its cause is inequality; its result is confiscation or gratuity.

2. *Is the Commodity subject to the Law of Monopoly or to the Law of Competition?*

From the point of view of pure theory, this distinction is vital; indeed, the most recent formulation of the law of value makes a sharp line of demarcation between the régime of monopoly and that of competition. In the domain of practical life, also, the distinction is of great importance, for the number of commodities subject to the régime of monopoly in modern times is great and growing. It is, indeed, true that the cases of a natural monopoly are perhaps not more numerous in modern times. Not only, however, do we find more and more legal monopolies, through the protection of industries by patents and copyrights, but it is a familiar fact that there has been a great increase in the number and significance of the so-called economic monopolies,—those industries where through the working out of economic law the tendency is toward an ever greater concentration of capital, gradually shutting out the existence of competition, until finally we reach the stage of complete monopoly. The familiar examples of this are, first, the so-called municipal monopolies,—gas, water, electric light, street railway business; secondly, occupations like the railroad and express, the telegraph, the telephone; and thirdly, the host of modern enterprises which are assuming the form of trusts.

The fundamental difference between the régime of monopoly and that of competition is, that in the former case price is not fixed at the cost of any marginal product. The important consideration here is that a monopolist fixes the price at the point that will yield the largest net return, and that he will limit the production to such an amount as will afford him this maximum monopoly revenue. He differs from the producer under competitive conditions in that he controls the supply. From this fact result such important differences

in the law of shifting that in many of the succeeding statements of principle it will be necessary to distinguish between the conditions of monopoly and those of competition.

3. *Is the Tax General or Exclusive?*

In almost all the writings on incidence, the particular tax under discussion is assumed to be special or exclusive. For purposes of pure theory, this assumption is legitimate, nay even necessary; for it is only through isolation that we can get a clear picture of the working of any single force. But it has not infrequently happened that results, laboriously attained as hypothetically true, have been at once applied to conditions under which the hypothesis is no longer valid. We may, for example, study the effects of a particular tax, like that on houses, and reach conclusions which are correct on the assumption that the tax is the only one; but in actual life, the house tax may be only one of a series of taxes, and this fact may at once invalidate our nicely calculated results. Other things being equal, the more general a tax, the narrower the taxless field to which the persons concerned can migrate; the less general the tax, the greater the chance that the tax will be shifted.

4. *Is there Complete Mobility of Capital?*

The ordinary theory is that when capital does not find its usual remuneration in one occupation, it will be transferred to another industry where the chances are better. In general, this hypothesis is valid, because it is based on the principle of least effort. The economic man may be assumed to endeavor to secure the greatest returns with the smallest outlay. He will transfer his capital from place to place, or from occupation to occupation, according to his opinion of the chances of profit.

At the same time, there may be obstacles to immediate transfer. Thus, where capital is firmly fixed, the owner may lose more by attempting to change it than he would gain by

the transfer. If the capital is unremuneratively invested in a given industry, there will be no fresh accessions of capital to it; and, as the other industries prosper, the relative diminution of capital in the first industry will, in the long run, be equivalent to a transfer of capital from it to the more prosperous occupation. But, in any given business, at any given moment, there may be all degrees in the rate of transfer, in the degree of mobility. At the one extreme lies the stock exchange business, where the mobility is almost complete; at the other lie those forms of agriculture in which capital devoted to improvements is almost entirely irremovable.

In addition to this cause of comparative immobility, we may mention minor reasons, such as the ignorance of the capitalist, the risk connected with the transfer, social considerations and legal obstacles.[1] Whatever the reasons, it is obvious that when a tax is imposed on capital in any industry, the smaller the degree of mobility, the less is the prospect of shifting, and the slower will be the process.

5. *Is the Demand for the Commodity Elastic?*

In the general proposition laid down above,[2] no reference was made to the conditions of the demand: it was assumed that demand would remain constant. But this assumption is obviously not the only possible one. In order fully to consider the changes in price caused by a tax, we must therefore regard the situation more closely from the point of view of the effective demand.

We speak of the demand for a commodity as elastic, when a change in price produces an alteration in demand. In such a case if the price goes up, the demand falls off; if the price goes down, the demand increases. There are as many degrees of elasticity in the demand for various commodities as there are variations in human wants and in the ability of men to satisfy those wants. On the other hand, if the

[1] See below, chap. iv, B, § 2. Professor Marshall generalizes the conception in the statement that all depends on "the fluidity, the viscosity, or the rigidity of the general elements." *Industry and Trade*, 1919, p. 411.

[2] P. 220.

demand for a commodity is not variable, the inelasticity may assume two forms. The demand may be inelastic in the sense of being constant, so that it always remains the same; or it may be inelastic in the sense that any attempted increase completely destroys the demand. We shall thus have to consider three possible cases, taking up first, under the heads *A* and *B*, the two forms of inelastic demand.

A. If the tax is levied on a commodity which the consumers must have and which they are willing to pay for at any expense, the demand will not decrease. With such an invariable demand the price of the commodity will rise by just the amount of the tax. The consumer will thus bear the whole burden. Practically, this is true of only a few commodities. In a large number of instances, however, prices may rise considerably without greatly affecting the demand. Such would be the case to some extent, at least, with absolute necessaries as well as with high-priced luxuries. The demand for the former is not apt greatly to diminish unless people starve. The effect of a tax on such commodities would rather cause a diminution in the more elastic demand for comforts, or in that for the less absolute necessaries. But the demand for absolute necessaries depends chiefly on the size of the population, not on the price of the article. In the class of high-priced luxuries, again, a tax, unless it be utterly exorbitant, is not likely to restrict consumption to any very great degree. Those who are generally willing to buy such luxuries are not quite so likely to be held back by any probable increase of price as the purchasers with a slightly lower standard of life. Of course, a decided decrease in the price of luxuries will have the effect of virtually removing them from the category of luxuries and putting them into that of comforts. But as long as the price remains so high as to constitute them real luxuries, the demand becomes relatively inelastic. It may, in fact, be laid down as a general rule that in the case of necessaries, as well as in that of expensive luxuries, great alterations of price go hand in hand with slight variations in demand; while in the case of moderate comforts,

small changes of price are accompanied by considerable variation in demand.[1] In the former case, then, that of absolute necessaries and some expensive luxuries, under the imposition of exclusive taxes there will be less migration of capital from the industries concerned because profits tend to remain constant. The tax will, in the extreme case, be shifted in its entirety to the consumer.[2]

What is only partly true, however, in actual life, of absolute necessaries and expensive luxuries, applies in a far greater degree to what are called complementary goods. For even in the case of luxuries there are generally some purchasers at the margin of doubt, who will be dissuaded from buying, and who will be tempted to substitute some other commodity if the price of the article rises. When, however, as frequently happens in industrial enterprises, we have two or more commodities which have to be joined in production to accomplish a desired result, the one supplements the other, and cannot be disused without serious loss. Familiar illustrations of such complementary goods are pen, ink and paper; needle and thread; cart and horse; bow and arrow.[3] Almost every industry on a large scale has its gradations of

[1] Most writers, like Walras, *Éléments d'Économie Politique Pure*, 2d ed., p. 519, fail to make this distinction, and contrast luxuries in general with necessities in general. Yet Cournot had already called attention to the similarity between great luxuries and indispensable necessaries in his *Principes Mathématiques*, pp. 162, 163, and in his *Principes de la Théorie des Richesses*, p. 306. *Cf.* on the whole subject of the elasticity of demand as between luxuries and comforts Rudolph Auspitz and Richard Lieben, *Untersuchungen über die Theorie des Preises*, 1889, pp. 44–53. The influence of taxation is discussed on pp. 68–73. *Cf.* also Marshall, *Principles of Economics*, 5th ed., 1907, book iii, chap. iv.

[2] Pantaleoni, *Traslazione*, pp. 115, 116, asserts that when the limit of effective demand has not been reached the tax will be divided between the producer and the consumer. His argument is that, since the producer's profits are decreased, he will transfer his capital to other industries. This great addition of capital will decrease profits all around, in the taxed as well as in the untaxed industries. Thus, the producer will get less profit than before.

This seems to be a mistake. It is, on the contrary, difficult to see why any capital should be transferred. So long as the limit of effective demand is not reached, the producers will not have their profits curtailed, because they can increase the price by the tax.

[3] *Cf. The Positive Theory of Capital*, by E. von Böhm-Bawerk, book iii, chap. ix.

such complementary goods. Even here, of course, there is no insuperable bar to the use of substitutes. But the price of the complementary goods must rise far higher than would be the case with an ordinary commodity, before the purchaser will be driven to accept a substitute. Where a tax is imposed on only one of two or more complementary goods, we approach the conditions of inelastic demand. A tax on one of two complementary goods, for which substitutes are found with difficulty, will thus tend to be shifted to a greater degree to the consumer.

It is interesting to observe that a tax on one of the complementary commodities which will raise its price tends to lower the price of the other commodity. If a tax is imposed on commodity *A*, which acts as a substitute or rival for commodity *B*, thus raising its price and diminishing its consumption, some of the demand previously satisfied by *A* is now transferred to *B*, and this augmented demand for *B* tends to raise its price, although by much less than the increase in *A*. A tax imposed on *A* thus raises the price of both *A* and *B* — that of *A* by less than the tax and that of *B* by less than the increase in the price of *A*. If, however, *A* and *B* are complementary commodities when the demand is so correlated that they must be used conjointly, the increased price of *A* consequent upon the tax will not lead to any increase in the demand for *B* nor therefore to any rise in its price. On the contrary, to the extent that the demand for *A* is diminished at all by the increase of price, the lesser demand will transfer itself to *B*, and since the lesser demand for *B* is not counterbalanced by a tax, the price of *B* will fall. Thus while a tax on one of two rival commodities will increase the price of both, a tax on one of two complementary commodities is apt to increase the price of the taxed commodity and to lower that of the untaxed commodity.[1]

[1] Professor Edgeworth distinguishes, in the *Economic Journal*, vii, p. 54, not only between rival and complementary commodities, as in the text, but between what he calls rival and complementary products, meaning by this the case of joint products where the goods are joined in supply, rather than in demand. The

B. We take up next the other case of an inelastic demand, that, namely, where the price of a commodity before the imposition of a tax has already reached the limit of the effective demand, and where an attempt to increase the price by any portion of the tax would totally annihilate the demand. Although such cases are exceedingly rare in practical life, and represent a theoretical possibility rather than an actual fact, they deserve at least a passing mention. The commodity must be sold at the accustomed price, or not at all; the price cannot rise. In such a case the tax cannot be shifted: the whole weight of the tax will fall on the producer. This will, in the long run, involve a decrease in production. The old producers will lose, and no new capital will be invested. Even if the supply is diminished, however, the price cannot increase; for, by the supposition, consumers will prefer to forego consumption rather than pay a higher price. The net result will be a cessation of production with an intermediate loss to the owners of fixed capital in the business. Under no circumstances can such a tax be shifted.

C. If, thirdly, the demand is elastic, as in the case of minor luxuries and of all comforts, — that is, of the general mass of commodities, — in the sense that the old price before the imposition of the tax falls below what some of the consumers will in an extremity be willing to pay, while the new price, including the tax, exceeds what a part of the consumers can afford to pay, the tax will be divided between the consumer and the producer. The proportions in which this division will take place will depend, so far as this element is concerned, chiefly on the elasticity of the demand. The more persistent the demand, the greater is the proportion of the tax which the producer will be able to add to the price; the more sensitive the demand, the smaller the sum by which he will find it profitable to increase the price. In other words, the greater the elasticity of the demand, the

nomenclature is not a very happy one, for it implies that a product is something distinct from a commodity. See also the criticism in Jannacone, *L'Imposta sul Trasporto degli Emigranti e la sua Incidenza*, 1908, p. 25, note.

more favorable — other things being equal — will be the situation of the consumer.

All changes in price, however, depend ultimately on the relations between demand and supply. Having just discussed the variations due to the elasticity of demand, what shall we say about those due to the elasticity of the supply?

At the very outset, we may mention those comparatively insignificant cases in which no increase of the supply is possible. This would be true of old works of art, of choice wines of a particular vintage and of similar articles. No matter what the inducement may be, the supply is inelastic, since it cannot respond to any increase in the demand. Under such circumstances, the extent to which the tax will be shifted to the consumer will depend on the conditions mentioned above under *A* and *C*.

In ordinary cases, however, the supply possesses some degree of elasticity; but the conditions affecting elasticity of supply are somewhat more complicated than those affecting elasticity of demand. It may, however, be laid down as a general rule that the elasticity of supply depends on two considerations: first, the extent to which differential advantages of production affect the supply of the commodity; and secondly, the ratio of product to cost, or the law of return to which the industry is subject. When it is said that the elasticity of supply "depends on" these considerations, no attempt is made to prejudge the question whether it varies directly or inversely with these conditions. It is this problem to which we shall now address ourselves under the sixth and seventh heads of this chapter.

6. *To what Extent do Differential Advantages of Production affect the Supply?*

The distinction here drawn is between those cases where all portions of the supply of a given commodity are produced at practically the same cost, and those cases where a

part of the supply is produced at a certain cost, and another part at a different cost. The nature of this distinction demands attention before we proceed to the discussion of incidence.

Ordinarily producers differ either in ability or in opportunity. While all similar units in the supply of a given commodity sell at the same price, the superior skill of some employers, or the more favorable situation of some factories, or the more fortunate combination of external causes, enables some capitalists to produce more cheaply than others. If, now, we assume static conditions; if, in other words, we assume that both demand and supply remain stationary, that there is no change in population, and no alteration in the methods of industry, — under such conditions it is clear that the normal value of the articles will be fixed, not at the average cost of production, but at the cost of producing the most expensive unit. In other words, normal value will then tend to equal the highest cost of production. So long as the demand is sufficient to call into existence commodities produced at different costs, and so long as there is no alteration in relative supply and demand, the price will be fixed at the greatest cost; and those who produce more cheaply will benefit accordingly. As the price is fixed at the cost of producing the most expensive portion of the supply, the difference between the lowest cost and actual price, in any given case, — that is, the difference between the cost of producing the article under the most disadvantageous circumstances and that of producing it under the more favorable conditions, — constitutes the producer's surplus or profits.

Under conditions of actual life, however, this assumption is inadmissible. The real conditions are dynamic, not static. There is a continual movement going on, not only from the side of demand, through changes in the population as well as in the wants of the purchasers, but also from the side of supply, through alterations in industry. Under such changing conditions of actual life, the conditions are somewhat more complex.

The ordinary course of competitive industry may be portrayed as follows. At any given moment, the commodity is supplied by a number of producers, and sells in the market at a fixed price. The more efficient producer, or perhaps some newcomer in the field with more capital or with improved machines or with better facilities for marketing the product, endeavors to capture a larger part of the market by putting out an increased supply at a somewhat lower cost of production. The mere fact of this increase of supply will tend to depress the price; and although his percentage of profit may be smaller than it would have been at the old price, he expects larger total profits because of his ability to sell more than before. The increase of supply, at lower price, must manifestly injure the less efficient producer at the margin of profitable production. In every business, there are always some producers who are able just to "make both ends meet." Their machinery is antiquated, their capital has been depleted, their business activity and knowledge are no longer what they should be, and their former profits, if there ever were any, have now vanished. They may continue for a time to struggle along, hoping against hope, and may live on their capital, being content to bridge over the next few years without profit; or, if they have invested heavily in unsalable buildings and machinery, they may deceive themselves by a fallacious system of book-keeping, and through a neglect to charge up the items of depreciation of stock or machinery, may figure out a nominal profit; or, finally, if their buildings occupy a good site, they may count as profit what is really to be apportioned to rent, and their gains will accordingly accrue to them not as entrepreneurs, but as landowners. But in every case the day of reckoning is sure to come. Sooner or later the producer will find that he is getting no return on his industrial capital. He will cease producing that particular commodity; and his place will be taken by some more efficient entrepreneur.

All industrial progress consists of a continual change at the top and at the bottom of the line of producers. Fresh

capital is continually coming in; the discouraged are continually stepping out. Normal value, under dynamic conditions, therefore tends in the direction of cost of production under the most favorable, not under the least favorable, conditions; it tends towards lowest cost, not highest cost. The temporary demand price at a given moment is as before — that is, exactly as under the hypothesis of static conditions — fixed at the point of highest cost; for at any given moment there is always some unlucky producer under competitive conditions who furnishes a part of the supply at cost. Next year he will be crowded out, and his place will be taken by some one who can produce at lower cost. What under static conditions was a part of the necessary supply becomes under dynamic conditions a part of the actual, but temporary, supply.

In practical life, therefore, competitive profits are dynamic in their nature. They exist only because at any given moment some entrepreneurs can produce at a lower cost than those on the margin, or no-profit level; but this margin, or no-profit level, is itself continually changing, and, under normal conditions of progress, is continually receding. A large class of commodities — in fact, all competitive articles — are, then, produced under such conditions that the profits represent the result of differential advantages of production. These differences may be summed up under four heads: differences of situation with reference to the market, differences in the possession of improved machines or processes, differences in the personal abilities of the producers and differences in opportunity or luck.

Whenever all the articles in a given class are produced at the same cost, in fact, the resulting profits are monopoly profits and not competitive profits. Not only does profitable production at the same cost imply monopoly, but monopoly necessarily means production at identical cost. Let us consider the last statement first.

A monopoly may be in the hands of either a single producer or a combination of producers. If there is only a single monopolist, there can obviously be only a single cost

for the supply. If there is a combination of producers, the same conclusion does not, at first blush, seem to follow. There may be a combination, as a trust or pool, where the original differences of business ability or of opportunity among the producers subsist after the formation of the trust. The mere fact, however, that the least favorably situated producer enters the trust shows that prices are no longer fixed at the point of marginal cost, for otherwise he could not secure any profits. As a matter of fact, the ordinary agreement in a trust or pool provides for a lumping together of the expenses and the receipts of all members of the combination, and for an apportionment of profits according to a fixed percentage. Thus, although there is technically no production of all the units of the supply at identical cost, economically and so far as concerns the relation of the producers to each other the various parts of the supply may be said to be virtually produced at the same cost.

In the second place, profitable production at the same cost implies, in the long run, a monopoly. It may conceivably happen that in a régime of competition all the producers at a particular moment are men of precisely the same abilities, and subject to the same conditions. In this possible case — which is apt to be true only of newly started industries — there would, indeed, be only one identical cost for all units of the supply. There could then, however, not be any permanent profits to all the producers, because prices could not permanently remain above the mere cost of production. If there were profits to all the producers, competition would induce one of them to lower the price in the hope of securing larger profits through greater sales; or, if he did not do so, some new producer would enter the field and cut prices. The only way in which prices could be permanently kept at the old figures would be through some control of the supply. As soon as this condition came to pass, however, we should no longer have free competition, but should be in the presence of some form of monopoly. Thus not only does monopoly imply production at the same cost, but production

at the same cost involves some form of monopoly.[1] Competitive profits, on the other hand, as we have seen, imply varying costs of production.

In some competitive industries, however, the differential advantages are far greater than in others. Obviously, when these differential advantages are great, profits are high for the more efficient producer; when they are small, there is only a slight margin of profit. The older the industry, or the simpler the conditions of production, the smaller is likely to be the margin of profit. Furthermore, it must be remembered that where there are great differential advantages of production, profits are high because of the margin between the lowest cost of the most efficient producer and the price fixed by the supply of the least efficient producer. In case there are no differential advantages of production — which, as we have seen, tends to be true only of monopoly — profits are high because of the complete control of supply. The existence of profits depends here not upon any competitor, but upon the conditions of maximum monopoly revenue — that is, upon the elasticity of the demand and the ratio of product to cost.

Let us proceed now to discuss the influence of these conditions upon the incidence of taxation in industries subject to the law of competition.

The fact that high profits or moderate profits accrue to the more favorably situated producer depends, as has just been seen, upon the differences in the cost of producing the various parts of the actual supply of a commodity.[2] If all the incre-

[1] Pantaleoni, *Traslazione dei Tributi*, who bases his treatment of the taxation of profits on what appears to be an exaggerated distinction between ordinary profits and surplus profits, fails to recognize the fact that industries in which all the articles are produced at the same cost are necessarily monopolies. Graziani, *Instituzioni di Scienza delle Finanze*, pp. 342–344, seems unhesitatingly to follow Pantaleoni in these points.

[2] Professor Carver, in his interesting article on "The Shifting of Taxes" which was published in *The Yale Review*, v (1896), p. 266, calls attention to this point. He puts the conclusion in somewhat different language, in saying that "the elasticity of the production or supply depends upon the extent to which rent enters into the production of the article in question." By rent he obviously means the

ments of the supply are produced at a cost which varies but little from the market price, not only will all profits be small, but any appreciable increase of cost due to the imposition of a tax will tend, ordinarily, to bring about a diminution in the amount produced, because it will trench on the narrow margin between cost and price. A tax will be likely, therefore, by limiting the supply, to raise price. Under such conditions, the consumer will tend to bear more of the burden.

On the other hand, if the margin between cost and price is considerable, and if the more favorably situated producers earn large profits, a tax will bring about a relatively smaller decrease in supply, and the augmentation of price to the consumer will tend to be less. In such cases, since the margin between the price and the cost for the most favorably situated producer is so great, the influence of the law of increasing cost, referred to in the next section,[1] will not be felt to such a degree at first; that is, there is greater likelihood that the more capable producers will be able to fill the gap caused by the cessation of production on the part of the less efficient producers. There may even be no decrease at all in the supply, the only difference being that the level of marginal cost is now, with a part of the tax added, a little higher than before. The effect of a tax may then be to ruin the less efficient producers, although the more favored producers will no doubt also have their profits somewhat curtailed; but a smaller part of the tax than before will be shifted to the consumer.

It was stated above[2] that the elasticity of supply depends not only upon the extent to which differential advantages of production enter into the supply, but also on the ratio of product to cost. Having discussed the first condition, we come now to the second.

result of differential advantages of production. Professor Carver's statement is to be criticised, however, because of his inattention to the other point which affects elasticity of supply — namely, the ratio of product to cost — which is discussed below.

[1] Below, p. 243. [2] See p. 233.

7. *Is the Article supplied at a Constant, an Increasing or a Diminishing Cost?*

It is well known that in certain occupations, or under given conditions, every successive application of capital or labor gives returns of approximately constant amount. The product is then in exact ratio to the amount of capital or labor applied, and the industry is said to be subject to the law of constant returns. The normal value of an article which is thus reproducible at a fixed cost tends to be equal to the cost of production.

In certain occupations, however, every successive application of capital gives returns, not of the same, but of a continually smaller amount. The industry is then said to be subject to the law of diminishing returns, or of increasing cost. This condition is normally true of agriculture, and forms the basis of the Ricardian law of rent. How far it is applicable to industry in general after a certain stage of profitableness has been passed, we shall see in a moment. On the other hand, the industry may obey, up to a certain point, the law of increasing returns or of diminishing cost. For instance, where in any industry the proportion of fixed or constant expenses to total expenses is large, a considerable increase of production can often be made without a corresponding increase of cost. Successive applications of capital and labor thus tend to produce returns which are, to a certain point, increasingly greater in amount. The product is not proportional, but progressive.

Although this conception of the laws of constant, increasing and diminishing returns is an old one, their application to the facts of actual life is often misunderstood. The law of constant returns is generally assumed to be the normal law, while the laws of increasing and diminishing returns are supposed to be the exceptions. A more careful consideration, however, shows that in ordinary competitive enterprises the law of diminishing returns is the normal law. This has usually been recognized as true of agriculture; but

it is equally true of other occupations. In order to show this clearly, let us examine somewhat more closely what is the real import of the laws of diminishing and of increasing returns.

The action of the law of diminishing returns manifests itself in two ways. The fact that after a certain point has been reached production does not respond proportionately to the energy applied, and that every new "dose" of capital and labor gives less and less returns, is familiar to all engaged in ordinary agricultural operations. The soil may be prevented from deterioration by the skilful use of manures; it may even be improved through the discovery of newer methods of cultivation; but the point must soon come when the increase of production will be overtaken by the increased application of capital and labor, and when the returns, as compared to the expenditure of capital and labor, will diminish. The second way in which the law may work itself out is generally illustrated by a mine. Here, although the returns may seem to be constant from year to year, the capital itself which yields the returns is being slowly consumed. At the end of a given period, not only will the returns themselves abruptly stop, but the possibility of securing additional returns in the future will also have disappeared. We must, therefore, abstract from each recurring return a sum which, when capitalized at the rate of production, will ultimately amount to the total original capital. Translated into ordinary business language, we must allow for depreciation of stock or plant — a depreciation which, when continued long enough, will entirely consume the initial capital. In the first case of diminishing returns, then, typified by agricultural land, the actual produce becomes yearly less; in the second case, illustrated by mining or badly conducted forestry, the nominal produce may remain the same, but the actual return on the investment of capital becomes continually smaller. In both cases, therefore, the cost is a proportionately increasing one.

When we take up the law of diminishing cost or increasing returns, we likewise find that it assumes two forms in ordi-

nary industry. The one great cause of increasing returns is what may be termed concentration; the other may be termed natural selection. How do these operate?

The economies of production, due to the concentration of smaller enterprises into a large concern, have been made familiar in recent years. In all enterprises where the investment of capital is considerable, the proportion of constant expenses to variable expenses is apt to be large. Some expenses necessarily grow with every increase of business; other expenses remain the same, whether the business is large or small. In fact, certain expenses will be actually smaller with large transactions concentrated into one hand, than with an equal amount of transactions distributed through a variety of producers. Up to a certain point, then, it is possible that an increase of capital and labor will give more than proportionate returns. We say, up to a certain point, — because we must assume that here also a time must come when the law of diminishing cost loses its efficacy; for we should otherwise get the absurd result of production without any cost at all.

But concentration is not the only cause of increasing returns. There is, under competitive conditions, as we pointed out above, a continual tendency for the less efficient producer to be crowded out by the more efficient. The marginal producer — he who is just able to keep his head above water — is, under ordinary conditions of industrial progress, thrown back into the ocean of failure and despair; his place is taken by a more successful competitor, a new marginal producer who, for a time, continues to exist because he can produce more cheaply, but who is himself soon forced to succumb. This continual weeding out, to change the metaphor, of the unfortunate or the incompetent is equivalent to the process of natural selection. The community gains, because it enjoys the services of the more efficient producer; and this greater efficiency shows itself in the increasing ratio of output to every new investment of capital. Thus, where industry is not stationary or retrograding, the natural selection of entrepreneurs means production at a diminishing cost.

If we attempt now to analyze the facts of actual business life, we shall find that the forces which make for diminishing returns and those which make for increasing returns are combined in different proportions in various enterprises. Upon the proportion in which they are combined depends the trend toward monopoly or toward competition.

Suppose, for instance, that in any enterprise the economies resulting from concentration, and the lower cost due to natural selection of the producers, are just about counterbalanced by the difficulties of securing additional room for production, or by drawbacks connected with the marketing of an increased output. In such a case, where the forces making for increasing returns and those making for decreasing returns are evenly balanced, the result will be production according to the law of constant returns. Under such conditions, however, there is no obvious reason why the more efficient producer will not be able to increase his output and thus gradually to crowd out his less efficient competitors until he secures a monopoly. Although he produces at constant cost, and his percentage of profit remains the same, his total profits will grow with the increase of production, except in so far as the greater output may slightly reduce the price. There is no rigid limit to the increase of output; the more efficient the producer, the greater the ease with which he will be able to command sufficient additional capital to expand his business. The law of constant cost, therefore, presupposes an industry on the high road to monopoly. ?

Suppose again that the industry is subject to the law of increasing returns or diminishing cost. Here it is plain that the trend will be still more strongly toward monopoly. Unless the returns are unequally increasing, so that the less favorably situated producer can still hold his own with the more fortunate producer, and thus continue to furnish an actual part of the supply, the more efficient producer will quickly — more quickly than in the preceding case — gain control of the market. When the conditions are such as to realize the economies of natural selection, the tendency

toward monopoly is a strong one. When the economies of natural selection are joined to those of concentration, the tendency toward monopoly is accelerated. It is precisely because in modern times the forces working toward diminishing returns have, in so many instances, been overtaken by man's mastery over nature that we notice the well-defined movement toward trusts, pools and combinations.

It is plain, then, that the law of constant returns, and still more the law of increasing returns or diminishing cost, is unfavorable to the persistence of competition. The normal law of competitive industry, under static conditions, is the law of diminishing returns or increasing cost; and even under conditions of actual life — that is, under dynamic conditions — a competitive industry may be said to obey the law of constant or of increasing returns only during a period of transition. Constant returns and, to a still greater extent, increasing returns or diminishing cost, tend toward monopoly. It is only at a given time, and in a given industry which is in the process, slow or fast, of being monopolized, that the laws of constant or of diminishing cost can prevail. When once the complete monopoly has been reached, the industry may obey the law of diminishing, constant or increasing cost according to the conditions of the particular case. But the chances of the continuance of the monopoly will be more secure when it obeys the law of constant cost rather than of increasing cost or diminishing returns; and they will be still more secure when the monopoly obeys the law of diminishing cost or increasing returns.

Let us now extend this analysis to the subject of incidence of taxation, and let us consider first the case of industries subject to competition.

If the competitive industry obeys the law of constant cost, the extent to which a tax will increase the price depends, other things being equal, primarily on the nature of the demand curve. The more persistent the demand, the greater, as we have seen, is the proportion of the tax which the producers will be able to add to the price. If a competitive

industry, however, obeys the law of increasing returns or diminishing cost, which as we have learned is true only of periods of transition, the tendency of the producer will be to add more of the tax to the price than in the case of constant returns. For any increase of price due to the tax will tend to decrease consumption. If he produces less, however, each unit will, under the assumption that he has been producing under conditions of increasing returns, cost the producer, exclusive of the tax, more than before. But if he remains a marginal producer, the price must finally find its level at this point of higher cost to the marginal producer. In other words, the price will tend to rise to a point higher than in the case of constant returns. Of course, if he does not continue to compete, but is crowded out by the abler producer, who can more easily capture the market under conditions of increasing returns, this result does not necessarily follow. It may happen, for instance, that the more favored producer will take advantage of the tax to drive the old marginal producer out by adding only a small part of the tax to the price, hoping to recoup himself by an ultimate monopoly; and then, when he secures a monopoly, he may put the price up again. But granting a continuance of the competitive conditions, with the old marginal producer still supplying his share of the output, the addition to the price, as long as the competition lasts, will tend to be greater than in the case of constant returns. It must continually be borne in mind that under the régime of competition price always equals marginal cost; whatever increases this marginal cost increases price. The action of the law of increasing returns tends to augment the marginal cost for the smaller output which results from the imposition of a tax; therefore it tends to increase the price.

If the competitive industry, on the other hand, obeys, as is usually the case, the law of diminishing returns or increasing cost—where each increment in the amount produced costs more than the last—the producer will be likely to add less of the tax to the price than in the case of constant or dimin-

ishing cost. For although the increase of price consequent upon the imposition of any part of the tax will decrease consumption, each unit of this smaller output will, on the hypothesis that he has been producing under conditions of diminishing returns, cost the producer less than before. Since price is fixed, under competitive conditions, at any given moment at the point of greatest cost, and since the cost to the marginal producer who remains a competitor is reduced, the price will now be a little lower than in the case of constant returns, and still lower than in the case of increasing returns.[1]

[1] The argument in the text may be illustrated by diagrams. In Fig. 1, let DD' be the demand curve. Let OX be the amount of product; let OY be the line of price; let OL be the marginal cost before the tax, corresponding to the supply curve $S'S$; let LC be the amount of the tax added to the price under the law of constant returns, so that the price after the imposition of the tax is OC, corresponding to the new position of the supply curve TT'. If OM is the amount produced at the original price OL, giving gross receipts of $OLSM$, the amount produced after the price has been raised to OC will be OM', giving gross receipts of $OCT'M'$.

If the industry obeys the law of diminishing cost, as in Fig. 2, the line $S''S$ will be curved downward. Before the tax is imposed, the quantity OM will, as before, be sold at the price OL or MS. But after the tax is imposed, equilibrium will be attained when the new supply curve TT'' intersects DD', which will in this case be somewhat to the left of the old point of intersection; so that now the quantity OM'' will be sold at the price $M''T''$ or OE, which is higher than OC.

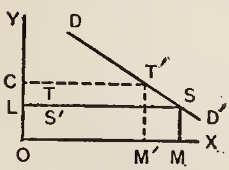


FIG. 1.
Constant Returns.

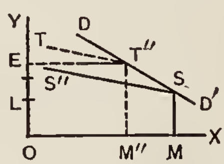


FIG. 2.
Increasing Returns
or Diminishing Cost.

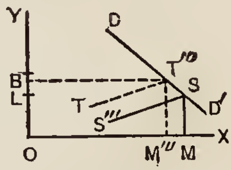


FIG. 3.
Diminishing Returns
or Increasing Cost.

If the industry obeys the law of increasing cost, as in Fig. 3, the line $S'''S$ will be curved upward. Now, after the imposition of the tax, the price will be fixed at the point T''', so that the quantity OM''' will be sold at the price $M'''T'''$, or OB, which is lower than OC.

The extent to which in any case the new price, after the imposition of the tax, exceeds the old price OL depends primarily upon the elasticity of the demand, that is, the sharpness of the curve DD'; but starting out from this increase of price under the law of constant cost, diminishing cost adds more to the price, increasing cost adds less to the price.

In the case of monopoly, there is indeed no marginal producer, but the influence of diminishing and increasing returns is apt to be similar to that in the case of competition. For if a monopolized article is the product of an industry which obeys the law of increasing return or diminishing cost,—where each increment in the amount produced costs less than the preceding,—then as compared with an industry subject to the law of constant return, the price of the article before the imposition of the tax will be apt to be lower, it the total cost remains the same. That is, other things being equal, the point of maximum monopoly revenue will be reached at a lower price (which means a greater output) in the case of an industry of increasing return than in the one of constant return. But if the price before the imposition of the tax is less it follows that, after the tax is imposed and given the same degree of elasticity of demand in both cases, the monopolist under conditions of increasing return will have more of a margin within which he can profitably raise the price than under conditions of constant return. The tendency will thus be that, as in the case of competition, he will add more of the tax to the price. *Vice versâ*, under conditions of diminishing return, or increasing cost, the monopolist producer will be likely to add less of the tax to the price than in the case of constant return.

Combining the conclusions reached under divisions 6 and 7 of this chapter, it is evident that elasticity of supply—by which we mean the responsiveness of the quantity produced to fluctuations in price—depends on a combination of two factors: the degree to which differential advantages of production exist, and the ratio of product to cost. The greater the chance that the imposition of a tax will cause a diminution of supply, the less favorable will be the situation of the consumer; the smaller the prospect of a decrease in the supply, the more favorable will be his position.[1]

[1] In the first edition of this work (pp. 151, 152) the reasoning was applied only to cases of competition. Professor Marshall, likewise, in his interesting discussion (*Principles of Economics*, book v, chap. xii, § 4, p. 524 of 3d ed.) deals

We may therefore sum up this part of the discussion that has been carried on under divisions 5, 6 and 7, as follows: The degree to which a tax on a particular commodity will be shifted to the consumer will vary inversely as the elasticity of the demand and directly as the elasticity of the supply. The elasticity of demand depends upon the extent to which the commodities in question are removed not only from the category of complementary goods, but also from that of absolute necessaries or of high-priced luxuries. The elasticity of supply depends upon the extent to which differential advantages affect the production, as well as upon the ratio of product to cost. It may be laid down as a general law that when the demand is more elastic than the supply, the consumer will bear a smaller part of the tax than when the supply is more elastic than the demand. Whether a tax will be shifted in its entirety, in part, or not at all, depends on the article itself, on the degree to which other articles may be substituted for it, on the size of the margin of profit, and on the degree to which monopoly enters into the nature of the industry on the product of which the tax is laid. For the working out of this law in practice, the reader is referred to the succeeding chapters of the present work. The effect of a bounty will naturally be the reverse of a tax.

These statements, so far as we disregard the limiting or opposing forces referred to in divisions 1 to 4 above,[1] contain the general law of shifting. We need still to discuss, however, a few considerations, limiting the general law, which, although of not very great theoretical importance, are nevertheless often of considerable practical influence in actual life. To these minor considerations we shall now address ourselves.

only with cases of competition. In the second edition (pp. 204 *et seq.*) an attempt was made to distinguish in this respect between conditions of competition and of monopoly. In the present edition, the attempt has been dropped in deference to the criticisms urged by Professor Edgeworth in the *Economic Journal*, ix (1899), pp. 293–302. The point involved is one of slight practical importance. With Professor Edgeworth's remaining criticisms, however, I am unable to agree, as will appear later on in the discussion especially of the tax on profits.

[1] See pp. 221, 226 and 227.

8. *Is the Tax imposed on Margin or on Surplus?*

When we say that the price of a commodity under the law of competition is fixed by the cost of production, we refer to the cost of producing the most expensive portion of the actual supply. This must not, however, be misunderstood. As was already stated, the tendency of prices is to gravitate toward the cost of producing the least expensive, not the most expensive, part of the supply. Through the processes both of concentration and of natural selection, the least efficient producers are continually being crowded out, and the price of the product is continually being reduced — up to that point, at all events, where there is no possibility of further economies. But while the tendency is thus in the direction of lowest cost, the temporary equilibrium between demand and supply at any given moment adjusts itself at the point of highest cost. In any given season, when a commodity is sold, there is under competitive conditions a producer who just gets back his cost, because his cost is equal to the price at which the whole supply is sold. In this sense he is the marginal producer, his product is the marginal product, and the price of the whole supply is fixed at the point of the cost of the marginal product.

It is clear, now, that if a tax is imposed it will increase the cost of this marginal product, and provided that the marginal producer continues to produce and to remain the marginal producer, the price of the whole supply will be raised by the amount of the tax. To the extent that the marginal producer is crowded out, a smaller proportion of the tax will be added to price.

It may happen, however, that the tax does not hit the marginal product at all. This may be due to two causes. In the first place, the tax may be imposed on product, but it may reach only other portions of the supply than the marginal portion. In the case of interstate or international competition, for example, one state may tax that part of the supply produced within its borders, while the price may be

fixed in the international market, where the most expensive increment of the supply comes from a country which imposes no tax. The tax assessed in the first state will thus not reach the marginal product, and will produce no effect on the price. Not until the tax is so high that the increased cost of this portion will relegate it to the position of the marginal product can the tax influence the price.

Secondly, a tax may not reach the marginal product because it is not imposed on production at all. It may be imposed, not on production, but on the results of production. In order that any change may take place in price, there must be, as we have seen, some alteration in the supply. A tax on the marginal product would obviously at once tend to cause such an alteration in the supply. But if the tax is imposed on what accrues to the producer after all his expenses are deducted and his accounts closed, the tendency to an alteration in the supply will be diminished. The surplus above all expenses constitutes net profits or pure profits. Pure profits are the results of price, not the conditions of price. A tax on surplus or profits, therefore, would not reach the marginal product, and would not cause any tendency to a change of price. It is only through the slower and more indirect influence of a general fall in profits that any alteration, if at all, would take place. The greater the extent, therefore, to which the tax falls on surplus, instead of on margin, the smaller the chance of any shifting of the tax.

9. *Is the Tax Large or Small?*

From the point of view of pure theory it might seem immaterial what the rate of tax is; for however slight the charge might be, it would still be mathematically measurable. But in practical life individuals often observe the same principle that is expressed in the legal maxim *de minimis non curat lex*. A producer who is called upon to pay a very small tax which would, under ordinary conditions, be shifted to the consumer, may prefer to assume it himself rather than

to run the risk of annoying his customer about what is after all a trifle. Or the price of the commodity may be fixed by custom, so that the producer will not dare to risk loss by any addition to the price. A good example of the first case is the small tax imposed by the United States in 1898 on parlor-car tickets. Rather than to annoy the passengers, the companies assumed the tax. An equally good example of the second case is the small additional tax imposed by the United States at the same time on certain brands of cigars and tobacco, which continued to sell at the same price after the imposition of the tax. As a former five-cent cigar or five-cent package of tobacco could not have been sold at five and a half or six cents, the only way in which the producer could escape the tax was through a deterioration of the article. How far competition would permit him to do this is uncertain. In all such cases the unit on which the tax is imposed is of considerable importance.

On the other hand, it is equally true that a very small tax may, in certain cases, make little difference to the consumer. The elasticity of the demand may not be appreciably affected. Under such conditions a producer who would otherwise be tempted to bear the tax for fear of losing the trade will have no scruples in adding the tax to the price.

10. *Is the Tax Proportional or Graduated?*

The considerations hitherto advanced as to the normal consequences of the imposition of a tax depend on the hypothesis that the tax is proportional. Since a graduated tax is the rare exception rather than the rule in practical life, those conclusions are in general valid. But we occasionally find — with increasing frequency in modern democracies — that the rate of a given tax is graduated, instead of being proportional. In almost all such cases the rate is graduated upward, so that the tax is progressive; in very rare instances the rate decreases with the amount assessed, so that the tax is regressive.[1]

[1] For a fuller discussion of these terms, see Seligman, *Progressive Taxation in Theory and Practice.* 2d ed., New York, 1908, pp. 4–6.

Where such a tax is assessed on surplus instead of on margin, our conclusions respecting the shifting of a tax require little, if any, modification. Whether inheritances, for instance, are taxed proportionally or progressively cannot alter the fact of the non-transference of the tax. But when a tax is imposed on the marginal product — for instance, on gross product or on gross receipts — it is obvious that a progressive rate may completely alter the normal conditions of profitableness. Under ordinary conditions, a proportional tax which reaches the marginal product tends to increase the price, as we have seen, by increasing the cost of this marginal product. But a progressive tax may be so arranged that it will increase the expenses of the more favorably situated producer far more than those of the one who has hitherto been the marginal producer. It depends upon the extent of the progression whether the former marginal producer now becomes the favored producer or not. It may easily happen that a progressive tax on product in general will not reach the margin at all. Where a proportional tax would exert a decided influence on cost, a progressive tax may exert, therefore, a far smaller influence. If a progressive tax be levied on the buyer instead of on the seller, the result may be just the reverse. In other words, the incidence of a graduated tax is often less predictable than the incidence of a proportional tax. In the remainder of this work, unless the contrary is definitely asserted, we shall always use the word "tax" in the sense of a proportional tax.

11. *Is the Commodity taxed a Final Good or merely an Intermediate Good?*

The entire discussion thus far has proceeded on the assumption that the commodity subject to the tax is disposed of by the owner, without considering whether the owner is the original producer or not. Without the phenomena of exchange, however, the conditions which affect the demand or supply cannot be present. Moreover, if the commodity

subject to the tax has reached its final owner, to be consumed by him — no matter how protracted the period of consumption — there is no opportunity for setting in motion the forces that affect price. Once the tax has been shifted to the consumer, it will remain there. On the other hand, if the commodity is consumed productively, instead of unproductively, the user is no longer the ultimate consumer; the commodity in question is only an intermediate good, not a final good; and the whole case is reopened.

In studying the consequences, therefore, of any particular tax in its practical operation, we must bear in mind not only the normal theory, but the limiting conditions. In order the better to prepare ourselves for the study of their application, let us sum up these principles.[1]

1. The more durable the thing taxed, the larger will be the series of annual payments demanded by the tax, and the more disastrous will be the weight of future payments when shifted back upon the initial proprietor by future owners.

2. If the object is monopolized, the price is not fixed by any marginal product; hence the tax will not be shifted so easily as in the case of the increased cost of a marginal product.

3. The more general or the less exclusive the tax, the narrower the taxless field to which the producers concerned can migrate; hence the greater the incentive to bear the burden themselves.

4. If the capital is fixed, or if there is any obstacle to perfect mobility, the shifting will be slighter and tardier than otherwise.

[1] It sometimes happens that a review of an author's book puts the points made by him in a new light. So Professor Ross, in his account of the first edition of this work, brought together the various principles laid down therein but scattered through the different chapters. In so doing, he has greatly clarified the whole exposition. See his essay, "Seligman's Shifting and Incidence of Taxation," in the *Annals of the American Academy of Political and Social Science*, iii (1893), pp. 444–463. The statement in the text differs, however, in some important points from that of Professor Ross.

5. If the demand is persistent, the producers will roll the tax upon the consumers through a rise in price. But if the demand is sensitive, the producers will bear more of the tax, or else some will migrate.

6. If different parts of the supply of a commodity are produced at greatly varying costs, the less efficient producers will be ruined by a tax which the abler producers can readily pay.

7. If the commodity is supplied at decreasing cost, the tendency is that the consumer will be likely to suffer more than in the case of an industry subject to the law of constant or increasing cost.

8. To the extent that a tax reaches the surplus rather than the margin, shifting will be less likely to result, since price tends to adjust itself to marginal cost.

9. The smaller the tax, the less will be the disarrangement in the equilibrium of supply and demand, and the slighter will be the normal action that will produce or prevent shifting.

10. If the tax is graduated instead of proportional, the tendency toward shifting will be accentuated or weakened according to the rate of the progression or regression.

11. If the object is a final good, a tax once shifted to the consumer will stay there. But if it be a commodity used in further production, the whole case is reopened, and all the other conditions may come in to determine whether or not the tax shall be shifted to the second, the third or the final consumer.

CHAPTER II

TAXES ON AGRICULTURAL LAND

THE assertion is frequently made that the American farmers are taxed out of all proportion to their ability to pay. This is due chiefly to the fact that they have to assume to a large extent the burdens of other taxpayers. Outside of the rural districts the great mass of personal property consists of intangible personalty, which, as a rule, escapes taxation almost completely. In the rural districts, on the other hand, the great mass of personalty consists of visible tangible property used by the agricultural communities. The country landowner, who is generally assessed also on his visible personalty, must thus pay, over and above his just proportion of the public dues, an additional share which ought to have been assumed by the owners of intangible personalty. What is a real property tax in the rest of the state becomes a general property tax for the farmer.[1]

The force of this contention is denied in the commonly accepted doctrine that the tax on the farmer's property is diffused throughout the community. The farmer, it is said, will add the tax to the prices of the products of his farm, and will in this manner recoup himself for his original outlay. The tax will thus be shifted, so runs the argument, from the producer to the consumer; since every one is a consumer, the tax will virtually fall on the community at large, and is hence a just and equal tax.

This argument is not a strong one, although, strange to say, its chief weakness has not hitherto been pointed out.

[1] *Cf.* the article on "The General Property Tax," in Seligman, *Essays in Taxation*, pp. 27–33.

Even granting for the moment that the tax will be shifted in its entirety, by being added to the prices of agricultural products, it would fall on individuals only so far as they were consumers of these products. In other words, if this were the only tax, it would be a tax on consumption — that is, on expense.[1] Now, of all bases of taxation expenditure is undoubtedly the least equitable. What a man spends is no criterion of what he is able to contribute to the burdens of the state. It bears no fixed proportion to taxable capacity. Whatever other tests we may have of individual faculty — whether property, product or income — not one of these has any definite relation to expenditure. If one man has triple the property or income of another, but, whether through thrift or miserliness, spends only the same amount, it surely cannot be said that the taxable capacity of the latter is equal to that of the former, especially if the latter spends up to a very narrow margin of his revenue, as frequently occurs. In the one case there is available for future exigencies a reserve fund which is entirely lacking in the other, that completely alters its owner's obligations to the community. Moreover, it is a well-known fact that differences in expenditures are rarely so great as differences in property or income. A tax on consumption alone would, therefore, fall with increasingly crushing force on all those classes whose expenses swallow up almost their respective income, or perhaps even encroach on their capital. It is not, of course, here intended to argue against the advisability of taxes on consumption as a part, and, because of certain other advantages, even a desirable and necessary part, of a tax system. The above contention is directed against expenditure as the theoretical basis of all taxation. A tax on real estate alone is, according to this doctrine of incidence, a tax on expenditure. It reaches only the poorer classes of society, and exempts in ever increasing proportion the earnings or the property of

[1] This was seen in the seventeenth century by Sir William Petty, who said: "A land tax resolves itself into an irregular excise upon consumption, that those bear it most who least complain." See above, p. 27.

the wealthy. So far as the farmers themselves belong to the poorer classes they would bear a disproportionate share of the burdens. Thus the single tax on real estate, if it were diffused throughout the community, would be most unjust and oppressive. In reality, however, there is no such general shifting: the tax on the rural landowner often tends to stay where it is put.

The question of the incidence of the land tax presents comparatively few difficulties. Since the time of Ricardo it has been treated frequently and, on the whole, with success. But it is remarkable that the writer who has discussed the subject with the greatest clearness and subtlety from the abstract point of view — the Spanish economist, Florez-Estrada — should have remained practically unknown to this day.[1] Nevertheless, both Florez-Estrada's and Ricardo's doctrines require some qualification in order to fit them to the actual conditions of every-day life.

Theoretically, there may be five different kinds of land taxes: —

1. A tax on economic rent.
2. A uniform tax according to the quantity or the quality of the land.
3. A tax on gross produce.
4. A tax on agricultural profits.
5. A tax on property or the selling value of the land.[2]

1. *A Tax on Economic Rent*

If land is taxed according to its pure rent, virtually all writers since Ricardo agree that the tax will fall wholly on

[1] *Curso di Economia Politica.* Por Don Alvaro Florez-Estrada. London, 1828, 2 vols. The quotations are from the sixth edition, published in Madrid, 1848. An excellent French translation was made by L. Galibert, under the title *Cours Éclectique d'Économie Politique écrit en Espagnol*, and published in three volumes in Paris, 1833. Pantaleoni is the only writer who has referred to Florez-Estrada. But he makes little effort to qualify any of the conclusions.

[2] Florez-Estrada makes a slightly different division. *Ibid.*, part iv, "Del Consumo de la Riqueza," cap. v, 'De la Contribucion sobre la propriedad territorial,' ii, p. 328; in the French translation, iii, p. 223.

the landowner, and that it cannot be shifted to any other class. Since land on the margin pays no rent, and the cost of the produce adjusts itself to that on the no-rent land, a tax on rent cannot affect the price of agricultural produce, and therefore cannot be shifted. The point is so universally accepted as to require no further discussion.[1]

The further question as to how far the tax on rent may be regarded as a burden on the owner, has been discussed above in treating of the phenomenon of capitalization. It will be remembered that when the rate of the tax exceeds that of other taxes, the difference is not borne by the new purchaser, but falls entirely upon the original owner. A permanent tax on rent is thus not shifted to the consumer, nor does it rest on the landowner who has bought since the tax was imposed.

A tax on pure rent, however, is very rare. The more difficult questions arise when the tax is assessed so as to include not only the rent of the landowner but the profits of the tenant farmer, or, as the case would be in America, where landowner and farmer are one, where the tax is assessed according to the value of the property. For the market price of land is equal to the capitalized value of its economic rent plus the profits of agricultural capital.

Ricardo maintained that if a land tax is assessed on all land indiscriminately, or if it is proportioned to the quality of the land, it will always be a tax on produce, and will consequently raise prices to the consumer. This doctrine has generally been adopted by his successors. In reality, however, the matter is not so simple.

Let us consider the cases in turn, taking up next —

[1] Ricardo, *Principles*, chap. 10. We can here only allude to the incidence of a tax on particular kinds of rent. Abstractly, it would be possible to tax land suitable for raising a special crop, and to exempt it as soon as it were used for some other crop. Such a tax on rent would be akin to a tax on the profits of some particular occupation, and would tend to be shifted to the consumer. But such a tax on rent is hardly more than a hypothetical case. Moreover, the possibility of using land for different purposes has led to a modification of the older doctrine that rent does not enter into price. *Cf.* Seligman, *Principles of Economics*, 4th ed., 1909, pp. 376–379.

2. *A Uniform Tax according to the Quantity or the Quality of the Land*

In this case there are four possible results, namely: (1) not only the tax but a sum over and above the tax may be shifted to the consumer; (2) the exact amount of the tax may be shifted to the consumer; (3) the tax may be divided between the producer and the consumer; (4) the tax may fall entirely on the landowner.[1]

The first case would be that of a fixed tax of so much per acre without distinction of value, as was true in some of the American commonwealths in the eighteenth century, especially Vermont and North and South Carolina. Suppose that there are three tracts of land producing wheat of the same quality, but, as a result of differences in fertility, yielding respectively ten, twenty and thirty bushels to the acre; and suppose further that this quality of wheat is worth 50 cents a bushel. Tract A would thus yield $5.00 an acre, tract B $10.00 and tract C $15.00. If a tax of 50 cents an acre is imposed on all the land, the owner of tract A will have to obtain for his produce $5.50 or cease cultivating. But if the price of ten bushels is $5.50, the price of the twenty bushels produced on tract B will have to be $11.00, and that of the thirty bushels on tract C $16.50, since the price of the bushel will always be fixed by the expenses of cultivation on tract A — that is, 55 cents. The owner of tract B will thus pay in taxes 50 cents more than before, but, assuming that the demand is constant, will obtain from the public $1.00 more than before, that is, he will make the consumer pay to him something more than the amount of the tax. Again, the owner of tract C will pay in taxes 50 cents more than before, but will obtain from the public $1.50 more than before. A uniform tax on quantity, therefore, inevitably takes out of the pockets of the consumers more than it puts into the hands of the tax collector.[2]

[1] *Cf.* Florez-Estrada, *op. cit.;* French translation, iii, pp. 221 *et seq.*

[2] Ricardo called attention to this in chapter xii of his *Principles.*

The second case occurs when the tax is not laid uniformly according to the quantity of land, but is graded at various rates per acre according to the quality of the land — as, for instance, in Kentucky and Connecticut during colonial times. Thus, if in the above case the tax per acre on grade A were 50 cents, on grade B $1.00 and on grade C $1.50, then not only would the price of wheat remain as before at 55 cents per bushel, but the amount of taxes paid by the landowners would exactly equal the increased price obtained from the consumers. Hence, whenever a land tax is graded so as to follow with precision the differential advantages of production, and where the land is cultivated intensively up to the point when the law of diminishing returns becomes effective, given a constant demand, the tax will be shifted entirely to the consumers, without causing them any additional loss. In practice, of course, such gradation of the tax has always been very rough, so that it is very unlikely that the exact amount of the tax will be shifted to the consumers.

The third case — that of a division of the tax between the producer and the consumer — arises when the graded acreage tax is imposed in such a manner that the progression of the tax exceeds the augmentation in price. If, for example, grade A were assessed at 50 cents, grade B at $1.25 and grade C at $2 per acre, the consumers would still have to pay more than before the imposition of the tax, but the owners of grades B and C would make less profits than before. The degree in which the landowner and the consumer would share the tax would depend, other things being equal, on the rate of the graduation or progression of the tax.

Finally, the fourth case — that of the tax resting entirely on the landowner — would occur on the supposition (which manifestly is purely hypothetical) that the lands of inferior quality were free of tax. For since such lands fix the price of wheat, the owners of better lands could not raise the price; and since the tax is imposed on acreage, the tax would simply represent a diminution of their revenue.

So much for the fixed tax per acre of land according to

quantity or quality — a tax that is to-day virtually unknown in advanced communities.

3. *A Tax on Gross Produce*

The most familiar example of a land tax on gross produce is the tithe. The incidence of a land tax on gross produce has been most clearly discussed by John Stuart Mill,[1] who at first followed Ricardo in holding that a tithe, because it is imposed on land of all qualities, reduces corn rents in equal proportions; but that in the same proportion as corn rent is reduced in quantity, the corn composing it is raised in value. The producer at the margin of cultivation, then, pays one-tenth of his produce in kind, but since all prices are fixed by his produce, his nine-tenths will sell for as much as the whole ten-tenths previously sold for. At first, therefore, a tithe would be shifted to the consumers.

As Senior has shown, however, this would be only the immediate, not the ultimate, effect.[2] The final result would be not an increase of price, but a diminution of production and therefore a deduction from rent. It would ultimately be a burden, not to the consumers, but to the producers; for the higher price of food and of raw material would tend to check the progress of the community, and to lower to that extent the demand for land. This point has been demonstrated so clearly by both Senior and Mill that it is not necessary to repeat their arguments, so familiar to all English-reading students. Moreover, von Thünen has pointed out that the question whether a land tax is shifted to the consumers depends largely upon the character of the population as consumers. In poor countries a land tax would not be shifted even in first instance to the consumers, because they could not afford to pay more. Such a tax would, then, simply lead

[1] This is true, however, only of the later editions, where Mill accepted the corrections of Senior. *Cf.* his *Principles of Political Economy*, book v, chap. iv, §§ 3, 4.

[2] *Political Economy*. By Nassau W. Senior. 6th ed., 1872, pp. 122–125.

to a lowering of the standard of life of the consumers, and to a decrease in the prosperity of the producers.[1]

Finally, the validity of the doctrine that the tithe, even in its immediate result, is shifted to the consumer depends on the assumption that the tax is a universal tax, applicable to all the land. This is not necessarily true. To-day, for example, in England, owing to the process of commutation of tithe, only part of the land is still tithable, so that, as in the case of all partial taxes, the burden is borne by the producer and not by the consumer. Even if all the land were tithable, the presence of international competition, as will be shown later, would render the tithe virtually a partial tax and thus not susceptible of being shifted to the consumer. Wherever the tax on gross produce still exists in civilized countries, it can no longer be regarded as one that is necessarily shifted to the consumer.

4, 5. *A Tax assessed according to Net Profits, or the Selling Value of the Property*

These two bases of the tax are, as has already been indicated, equivalent; for the selling price of agricultural land is nothing but the capitalized value of the net profits ordinarily derived from its use. Theoretically there may be two cases: either the land tax is a part of a wider system which taxes also all other net profits or all other capital or property; or the land tax is a single, exclusive tax, while other profits or other classes of property are exempt.

In the case of a general tax on profits, or that of a general property tax, it is difficult to see how the land tax can be shifted to the consumer. The theory of its complete shifting to the consumer assumes that the landholder at the margin of cultivation will otherwise abandon his farm, after the imposition of the tax, and transfer his capital and labor to some other occupation. But to this argument it may be

[1] *Der isolirte Staat.* Von Johann Heinrich von Thünen, 1826, pp. 259–269. [2d ed., Erster Theil, 1875, pp. 326–339.]

objected that, if all other profits or property are equally taxed, he will gain nothing by such a transfer. In fact, under a general tax there will be no inducement for him to abandon his farm. Since the supply will thus not be diminished, prices will consequently not rise. If, therefore, a tax on landed profits or landed property were simply a part of a general income tax or of a general property tax, there would be no shifting of the tax. It would tend to stay where it was placed in first instance.

It may be asserted, however, that our property tax is general only in name, since personal property, as has been indicated above, is virtually exempt from taxation outside of the rural districts. It may further be said that Ricardo and the other English authors discussed this form of the tax on the assumption that it was an exclusive tax. Nevertheless, it may be affirmed that, even on the assumption that the tax on agricultural profits or real estate is an exclusive tax, it does not necessarily follow that this will be shifted to the consumer.

Ricardo's theory would hold good only on two conditions: first, that there was absolute mobility of capital and labor; and second, that the community in question was so isolated that the farmers could fix the price of their own produce. In actual life, however, these conditions are far from being really existent.

What really confronts us is the existence of economic friction. While most economists are willing to admit that friction exists,[1] its influence in the application of abstract laws to actual conditions has unfortunately been entirely too much neglected. Yet, as it has been vigorously put: "Economic friction includes everything that is of practical importance."[2]

[1] The ordinary view is represented in the following apt illustration of Professor Marshall: "Such adjustments obscure the incidence of agricultural rates, as the eddies of a wind rushing past a house will often carry snowflakes upwards, overbearing, but not destroying, the tendency of gravitation."—*Royal Commission on Local Taxation. Memoranda chiefly relating to the Classification and Incidence of Imperial and Local Taxes*, 1899, p. 122. This will be hereafter quoted as *Memoranda.*

[2] J. S. Nicholson. *Rates and Taxes as affecting Agriculture.* 1905, p. 123.

The classical theory rests on the assumption that the owner of the worst land in cultivation will abandon the land rather than cultivate it at a loss; and that the decrease of supply will raise prices to the consumer. It is, however, incontrovertible that an increase of price often leads to a decrease of consumption, which again reacts upon the price, so that at best only a portion of the tax may be shifted to the consumer. This point has been fully explained in the chapter on general principles. Furthermore, it is in actual life frequently a difficult matter for producers to decrease the supply of agricultural products. To those acquainted with the conditions under which the cotton crop is grown in the Southern States of the American Union, this is a familiar matter. Although annual conventions of the cotton growers repeatedly resolve that the low price of cotton is due to over-production, and that the supply should be curtailed, it seems practically impossible to reduce the cotton acreage. In order that any appreciable influence might be felt in the price, it would be necessary for whole tracts of the lands at the margin of cultivation to be abandoned, or to be used for some other purpose. Now this practically means wholesale ruin for immense classes, who have perhaps invested large sums in improving the land, which they consider fit for only that particular purpose. Rather than abandon the land they will often prefer to continue cultivation at a remuneration which will just cover bare living expenses, hoping for a change in the market. In other words, the tax would often merely degrade the cultivators. Only when the tax is so exorbitantly high as to swallow up the whole rent, or all the agricultural profits, so as to leave the cultivator an inadequate margin for living expenses, will he abandon the land in such large quantities as to effect a material decrease of the supply. But such a tax is unusual in civilized communities.[1]

[1] This view is accepted by Professor Nicholson in his *Rates and Taxes as affecting Agriculture*. London, 1905. Professor Nicholson points out that a large part of the rent "is quite different from the economic rent of pure theory," and is really like industrial profits (p. 128). It "follows that a tax or rate that

In other words, a tax on the landowner, if it be not extortionate, will simply reduce his profits. In proportion as the theory of the absolute mobility of capital from agriculture to commerce, or from one kind of agricultural investment to another, is attended with practical difficulties, the process of shifting the tax to the consumer will be impeded.

It will be said, however, that a rise of price may be brought about not only by an actual diminution of the produce, but by a relative diminution, *i.e.* by a failure of the cultivators to increase the acreage in the face of an augmented demand. To this it may be replied that in old countries the operation of the law of diminishing returns will prevent, or at all events impede, any great or sudden increase of output. While in new countries, where an increase of acreage is relatively easy to accomplish and where the agricultural prosperity that follows an augmented demand is apt to be marked, the imposition of a tax will prevent the increase of supply only where the tax is so high as to absorb the whole difference between the old and the new margin. This, however, is very unusual. So that it may be said that the forces which impede the transfer of a land tax to the consumer are operative in case both of an actual and of a relative restriction of the output.

Secondly and more important, the Ricardian theory assumes a completely isolated community. In actual life, however, the market value of agricultural produce is fixed by the conditions of production in widely separated localities or countries. The imposition of a tax on the landowner of any one particular locality, therefore, cannot change the price of

falls on this part must have the same effect as a tax on any similar form of industrial profit." Again, as Professor Nicholson puts it, "owing to the large amount of fixed capital in agriculture, including the improvements fixed in the land, it will pay for a long time to work the land in some way, so as to avoid, at any rate, a total loss. Landlords and farmers cannot remove their capital to more flourishing industries. Besides this fixed capital, there is also their fixed skill, and so long as any surplus at all remains in the form of gross rent, the land will be cultivated, although it does not give the ordinary interest on all the capital sunk in it." *Ibid.*, pp. 132–133.

the product. The older theory seems to have overlooked the facts of international relations. If taxes precisely identical in character and amount were imposed by all countries on all farmers, then indeed, given the complete mobility of capital just discussed, the tax might be shifted to the consumer. But this is never the case. The Western farmer, the price of whose wheat is fixed in Liverpool by the conditions of production in countries thousands of miles distant, will not get a whit more for his products if his taxes are doubled. He, and he alone, must bear the burden of the tax.[1]

The real considerations in the case seem to be as follows. Even if we assume that the tax on agricultural land is an exclusive tax, then, in case the land yields a product the price of which is fixed in the international market, so much of the assessment as is a differential tax cannot possibly be shifted to the consumer. The remission of any surplus of taxation over the rate assessed in the competitive countries will enure to the benefit of the producer. The differential part of a tax will stay where it is put.

But how about that portion of the tax which is common to all the countries? In this case it is necessary to distinguish. Under actual conditions of international competition, countries may be divided into three classes — marginal, intra-marginal and sub-marginal producers. At any given time, the price of the product, according to the commonly recognized theory, will be at the point of the greatest cost of production, this marginal cost being the cost which is just remunerated by the price. The country which can produce at a lower cost, or within the margin of cost, thus becomes the intra-marginal producer, and the difference constitutes the profits of production, or if we put it in the old terms and abstract from the conception of agricultural profits, the economic rent. But while the price at any given moment is influenced by the highest cost, the tendency of prices is to move in the direction of the lower cost of the intra-marginal producer, who thus comes to set the pace.[2]

[1] *Cf.* above, the discussion of general principles, pp. 249–250.

[2] *Cf.* Seligman, *Principles of Economics*, 9th ed., 1921, §§ 105–106.

This statement, however, is not quite complete in that it overlooks the fact that in the production of commodities like agricultural produce there are frequently periods of shorter or longer duration when the price does not begin to remunerate the cost of production, and where production nevertheless goes on. This annual loss, if continued, becomes converted, or capitalized, into a lower selling (and rental) value of the land. Thus in England, during the latter part of the nineteenth century, the prodigious quantities of wheat produced on the virgin soils of North and South America forced down the price not only to the margin of cost in England, but far below that margin, so that England became one of the sub-marginal producers. In England, where the tenant farmer could, of course, not continue to produce at a loss, the loss was shifted to the landowner, who was compelled to accept a lower rental. In New England, where the farmer was also the owner, the continued series of losses led after a time to the disappearance of the producer on the "abandoned farms." In each case, the periodic fall in land-rents (or the abandonment of the poorest farms) led to a new temporary margin of cost, which was again converted by the foreign competition into a sub-margin, leading to a repetition of the process, until after the lapse of a long term of years the lowest point was reached.

This distinction between intra-marginal, marginal and sub-marginal producers, however, is to be carried farther. It applies not only as between new and old countries, but as among all countries. Even in a new and fertile empire, a succession of bad harvests may increase the cost per bushel, and if coupled with a more than compensatory abundant crop abroad, which results in a fall in price, will mean positive loss. Such a country would thus become during that period a sub-marginal producer, and the farmers would all run into debt. This is what happened in the United States during the "bad years" of the early nineties, and which, as is well known, engendered the silver movement. The same country may, therefore, be now an intra-marginal, now a marginal and

now a sub-marginal producer, and its agricultural industry may run through the gamut from great gains to great losses.

If now we study the influence of a tax which happens to be identical in all the countries involved, we shall realize that it may work differently according to the above conditions. Suppose that in three countries, *A*, *B* and *C* (let us say the Argentine, the United States and England), the cost of producing, irrespective of taxation, a bushel of wheat at a given time is 50, 70 and 90 cents, respectively, and that the conditions of the market are such that the wheat sells at the moment at 70 cents a bushel. If a tax of 5 cents a bushel is imposed in each of these countries, what will happen?

In the long run, indeed, the tendency would obviously be for the price to rise to 75 cents. The long run, however, may never come to pass. The producers in country *A*, who have the whip hand, may fear that if they put up the price to 75 cents they may spoil the market for the next year, by inducing country *B* to increase its acreage or preventing *C* from diminishing its output. This consideration, together with the fact that they are already making large profits as intra-marginal producers, may lead the producers in *A* to be content with the old price, despite the tax. It is a familiar fact that in periods of prosperity farmers are, as a rule, careless and lavish. Such a tax may, therefore, be willingly borne by country *A*. On the other hand, the producers in *B* and *C* will be compelled to bear their own taxes themselves, because they do not control the market, the price always setting in the direction of the lowest or intra-marginal cost. If the tax were remitted by their own country, producers in *C* would lose less, and producers in *B* might even emerge with a slight gain.

It may, therefore, be maintained that even as to that part of the tax which is the same in all countries, the producers must bear the tax when the country is in the sub-marginal or marginal class; and that the producers may bear the tax when the country is in the intra-marginal class.[1]

[1] M. Gaston Gros, in an interesting discussion, argues that the shifting of the tax to the consumer depends on whether the country is an importer of food

If we join to the above considerations the reflection that in old (and generally sub-marginal) countries the land tax is likely to exceed the common rate, and that in new (and generally intra-marginal countries) the land tax is a part of a general property tax, we are impelled to the conclusion that the forces making for a shifting of the tax to the consumer are very measurably weakened. What is true, however, of competition between nations is equally true of competition between sections of the same country. Under modern conditions there is a continually smaller range of agricultural products which possess a geographical monopoly of the local market. We therefore finally reach the position, that under actual conditions of economic life the hypothetical conclusions of the older theory must be considerably modified, and that a tax on the net profits or selling value of the land is generally not shifted to the consumer.[1]

The further query may arise as to whether the tax, if it rests on the land, will not be capitalized or amortized into a lower selling value of the land, thus enabling the new purchaser to escape any burden by buying himself free of the tax.[2]

(*pays en deficit alimentaire*), an exporter of food, or a self-sufficing country (*pays en équilibre alimentaire*). *L'Impôt sur le Revenu*, 1907, p. 37. That this is not the real criterion, however, is apparent from the fact that the exporting country may be either the sub-marginal producer (as often in France) or the intra-marginal producer (as generally in America).

[1] *Cf.* Nicholson, *Rates and Taxes as affecting Agriculture*, 1905, pp. 118–119: "It is easy to show that under present conditions, the consumer will bear very little, if any, of the burden. He could only be affected by a rise in prices, and prices are mainly dominated by foreign competition. . . . Practically, however, in England at present, the consumer is not affected." So Bastable says: "On an extreme hypothetical view, it might be argued that this portion of the burden would," in the long run, "be passed on to the consumers of agricultural products. Actual conditions clearly prevent this." — *Memoranda*, p. 142. *Cf.* Leonard Courtney: "In respect of all commodities which come upon the market under conditions independent of the distance of the place of origin, the consumer would almost immediately lose whatever theoretical advantages he might appear to grasp at first." — *Ibid.*, p. 87. M. Gaston Gros, *Impôt sur le Revenu*, p. 37, also agrees that in France the consumer does not bear the tax.

[2] This contention is frequently met with, and has been advanced, *e.g.*, by Mill (*Principles*, People's ed., p. 494), Sir Robert Giffen and others. Thus Sargant says (*Memoranda*, p. 213): "Rates levied on agricultural land appear to me to

To this objection a double answer can be given. In the first place, the capitalization or rent-charge theory holds true only on the assumption that the tax remains virtually unchanged for a term of years. But a tax assessed on the net profits or the selling value of agricultural land does not remain the same even though the rate does not change, because the profits and value of agricultural land vary from year to year, sometimes very materially. This, as we shall see in the next chapter, is the principal distinction between agricultural and urban land. When, however, there is no constancy in the tax, there can be no capitalization. Secondly, even if capitalization does take place, we must remember that the new purchaser of agricultural land is rarely aware of the process or, if he is originally conscious of it, soon forgets it. His profits are so entirely dependent on the mutations in the price of his produce, that he invariably reckons his taxes among his outgoings, and resents paying at a higher rate than do the owners of other property. The statesman cannot afford to ignore this psychological fact in framing his budget.[1]

In fact, if the older theory were absolutely true, it would be virtually impossible to make the landowners or farmers suffer by any land tax, provided it were not levied expressly on pure economic rent. A country might then raise its entire

fall practically exclusively on the owner or successive owners of the land at the time when they are first imposed or anticipated." Even Marshall says: "Such taxes on agricultural land as have been imposed for a long time are no direct burden on present landowners, farmers, or labourers."—*Memoranda*, p. 121.

[1] As Gaston Gros puts it: "payer des contributions plus l'un que l'autre, c'est une injustice, et l'ingéniosité de tous les théoriciens se brisera contre cette simple affirmation du bon sens populaire."—*L'Impôt sur le Revenu*, p. 40.—Cannan seems to forget this when he says in the *National Review* for November, 1896: "No one is brought up in the belief that he is to inherit land or houses free of poor rates. No one buys lands or houses without knowing that such things exist. The man who sells consols and buys lands, and then clamors for remission of rates, is no better than a thief." *Cf.* also his statement in *Memoranda*, p. 192.—For an extended argument against the "hereditary burden" theory as applicable to agricultural land in England, see J. Row-Fogo, *An Essay on the Reform of Local Taxation in England*, 1902, pp. 165–182, and Nicholson, *op. cit.*, chaps. ii and iii.

revenue by imposing taxes on land alone, and would in no wise injure the agricultural interests. Yet all history has proved the error of this view. From the day of the exactions of the Oriental monarchs and of the later imperial Roman tax system to the mediæval methods of Spain and the arbitrary land tax of pre-revolutionary France, much of the misery of the agricultural classes must undoubtedly be attributed to the revenue system which burdened primarily the farmer. Implicit reliance on the Ricardian doctrine might justify every exaction on the farmer, but would inevitably react on agricultural prosperity.[1]

Our conclusion, hence, is that under actual conditions in America to-day the landowner may virtually be declared to pay in last instance the taxes that are imposed on his land. At all events, it is erroneous to assume any general shifting to the consumer. To the extent that our land tax is a part of a general property tax, it cannot possibly be shifted; to the extent that it is more or less an exclusive tax, it is even then apt to remain where it is first imposed — namely, on the landowner.

In England, where the farmer is almost universally the tenant and not the landowner, and where the rural tax, or rate as it is called, is levied according to rental value and imposed on the occupier, the question is primarily as to the incidence of the tax between the landowner and the tenant. Much the same is true of the other European countries where the peasants or farmers are not the owners, although there the tax is frequently assessed on the owner rather than the tenant.

The ordinary doctrine which played such a great rôle at the close of the nineteenth century in England is that the tax on agricultural rents falls on the landowner. The reasoning is simple. At any given time, when the tenant makes out his lease, he makes allowance for the taxes which are collected from him. The rent which he is

[1] Cf. *De la Monnaie, du Crédit, et de l'Impôt.* Par Gustave du Puynode, ii, p. 153.

willing to give will vary with the tax which he is compelled to pay. If the tax is imposed on the owner instead of the tenant, the same argument will hold good, there being no reason why the owner should be able to compel the tenant to pay more. The burden hence falls wholly on the landlord. The force of this general argument, however, is attenuated by three considerations: the fact of new or increased rates, the existence of a real competitive rent, and the character of the rent itself.

The first point is this. It may happen that after a lease has been made out an increase in the rates takes place. Where, as in England, the tenant farmer advances the tax, the increase must necessarily be borne by him until the expiration of the lease. It may be contended that this consideration is of slight consequence, because in the long run the tenant will insist on an allowance for the increase when a new lease is taken. Tenants, however, it must be remembered, deal with short-run, not with long-run, conditions, and if the land is leased for a comparatively protracted period the occupier will undoubtedly suffer in the interval. Ultimately, however, it may be conceded, the landowner will be compelled to decrease the rent.

In the second place, the conclusion in the last sentence rests on the assumption that the rent is a true competitive rent. But this assumption is not entirely accurate. For in England most of the farmers are charged less than the purely competitive or rack rent. As Bagehot points out: "The wish for political power, for personal popularity, for social deference, frequently inclines an owner not to charge all he might for his land. The wish to be considered a good landlord, and the fear to be thought a bad landlord, are powerful motives. . . . No one can say how far these motives will influence men or how far they will not."[1] It may, however, be stated that in the case of non-competitive rents an increase in the local rates will fall on the tenant, and not on the landlord. As Mr. Goschen puts it,

[1] Editorial in the *Economist*, April 15, 1871, p. 439.

"any increase in local burdens must fall on the margin between the actual rent and the rack rent, and so far diminish the advantage derived by the farmer from his actual rent being below a rack rent; until that margin were exhausted, it would naturally be useless for him to apply to his landlord to readjust his rent." [1] In the same way a remission of rates will inure to the advantage of the tenant.

On the other hand, the recent depression of English agriculture has caused a change in the opposite direction. The remarkable fall in prices during the seventies and eighties not only destroyed the margin between actual rents and economic or rack rents but, in many cases, created a margin on the other side. Although the farmer kept on struggling to adjust his rent to lower prices, the movement was a slow one; and the fall in actual rents did not keep pace with the fall of economic rent due to these lower prices.[2] Under such conditions, a remission of rates would be of all the greater advantage to the tenant.

We come finally to the third point; namely, that most land taxes are really not taxes on rent at all. Under actual conditions taxes on agricultural land are in great measure taxes on agricultural profits.[3] We are told that "over a considerable part of England the economic rent in the strict sense has vanished" and that the so-called

[1] See the analysis in Goschen: "Draft Report to the Select Committee on Local Taxation of 1870," in his *Reports and Speeches on Local Taxation*, 1871, esp. pp. 165, 166.

[2] *Local Taxation and Finance*. By G. H. Blunden. London, 1895, p. 42.

[3] Ricardo himself realized this. *Principles*, chap. xi, par. 7. — Professor Marshall, in *Memoranda*, p. 116, thinks that popular usage is correct in treating the income derived from durable improvements in land as rent rather than profits, "for most purposes." But when he says that a "tax could not for a long time produce an appreciable effect on the amount of such improvements nor therefore on the supply of the commodity, — nor therefore on the price," he is considering the incidence as between producer and consumer, not as between landowner and farmer. And even here, he thinks that the income would be "more akin to profits than to rent for the purposes of discussion as to the ultimate incidence of taxes." As to the accuracy of the statement that a tax on improvements could not for a long time produce an appreciable effect on such improvements, see note on next page.

rent of land "is, to a great extent, simply profit on the capital sunk in the land by the owner, or his predecessors in title."[1] The profits are divided between the two parties — the landowner receiving his rent, the tenant farmer receiving his share in the shape of a surplus over all outgoings. The incidence of a land tax depends therefore largely on the question as to who is the stronger party in the struggle of shifting. In periods of prosperity, where the tenant's surplus is a large one and the competition for farms keen, the landlord will obviously be in the better position and may be able either to make the farmer bear the tax which is imposed on him, as in England, or to shift to the farmer the tax which is assessed on himself, as on the continent. On the other hand, when times are not so prosperous, there will be a competition for tenants rather than for farmers, and with the fall in the tenants' profits, the owner will be forced to accept a larger share of the tax.[2] Even then, however, it cannot be said that the farmer escapes injury, notwithstanding the fact that his rent decreases by the amount of the tax. For as the landlord's rent diminishes he is unable to put as much as usual into the land in the way of permanent improvements.[3] With this diminution in the outlay on the land the tenant will obviously earn a

[1] Nicholson, *Rates and Taxes as affecting Agriculture*, 1905, p. 124. *Cf.* the *Final Report* of the *Royal Commission on Agriculture*, 1898, p. 26.

[2] Gaston Gros comes to the same conclusion, although he expresses himself a little differently. The shifting of the tax, he thinks, depends on the "état magnétique" of agriculture. In periods of industrial prosperity, when capital is attracted away from agriculture, the tax tends to rest on the landowner; in periods of agricultural prosperity, on the tenant farmer. — *L'Impôt sur le Revenu*, p. 37. Nicholson puts the case as follows: "The incidence of rates as between landlord and tenant depends largely on the relative mobility of the respective capitals; it is a contest between two sorts of profits, or an adjustment of two sorts of losses." *Op. cit.*, pp. 129–130.

[3] In England it is estimated that nearly forty per cent of the rent actually received is spent by the landlords, partly for public charges (exclusive of income tax) and partly for the maintenance of the property. Capital expenditures on improvements alone are estimated at about twenty per cent. *Final Report* of the *Royal Commission on Agriculture*, 1898, pp. 27–28.

still smaller surplus. To all these points, finally, we must add the reflection that in many cases the land tax is not a tax on net produce at all, but in its actual operation a tax on gross produce;[1] and, as we have seen, a tax on gross produce is not necessarily shifted to the consumer. It is considerations such as these which have often been overlooked by the broad generalizers, and which have contributed not a little to the scant courtesy shown to the economic theorist by the practical man.[2]

We may therefore sum up the discussion by stating that under actual conditions the tax on agricultural land is but rarely shifted to the consumer, and that, where tenant farmers are found, the tax is borne by either the owner or the tenant, according to the changing conditions of agricultural prosperity. Even, however, where the tax tends to be borne by the owner, the effects of the tax may be injurious to the tenant.[3]

[1] Von Heckel, referring to the German land tax says: "Das praktische Resultat der Katastrierung ist daher, dass sie mehr Rohertrags- als Reinertragskataster liefert, und die Grundsteuer so einer Rohertragssteuer näher kommt als einer Reinertragssteuer." — *Lehrbuch der Finanzwissenschaft*, I (1907), p. 261.

[2] This is evident in much of the evidence given before the Royal Commission on Agriculture. As Mr. Rew puts it: "The overwhelming testimony of occupiers of land is that rates do affect them, and that their reduction or removal will benefit them, and even if the theories of political economy do not endorse my view, I, for one, prefer to rely on the evidence of practical experience." — "Local Taxation in Rural Districts," in *Journal of the Agricultural Society*, 1896. *Cf.* also Row-Fogo, *An Essay on the Reform of Local Taxation in England*, 1902, p. 169.

[3] This view was accepted by the British Parliament when, in 1896, by the passage of the Agricultural Rates Act (59 and 60 Vict. c. 16) occupiers of agricultural land were exempted from one half of the local rates. The act, however, does not apply to sewers' or other rates, which directly and measurably benefit the land, nor to rates where agricultural lands were already charged a half, or more than a half, less than buildings, such as the general district rate in urban districts or the special expenses rate in rural districts.

CHAPTER III

Taxes on Urban Real Estate

In the case of city real estate it is necessary to make a distinction between the two components of the real estate tax, the ground tax and the building or house tax — the tax on the site and the tax on the structure; for they are governed by distinct principles. Strictly speaking, we should have drawn the same distinction in the case of the agricultural landowner. But in that case the distinction is unimportant, because — in America at all events — the tenant is, in almost all cases, the owner and because the value of the farmer's buildings is generally of minor importance when compared with the value of his land. So far as this is not true, however, the principles now to be discussed apply there also.

In American cities, where the occupiers of houses are frequently not the owners, the real estate tax is levied on the owners of property; and the question of ultimate incidence concerns only the landlord and the tenant. In England, where local rates are levied as a general rule on the occupiers,[1] rather than the owners, and are proportional not to capital value but to rental value, the question is more complicated because of the peculiar divisions of ownership.

[1] The local rates in England are, theoretically, assessed on the occupier. Even for a long period before the Elizabethan poor law (43 Eliz., chap. ii.), which is the basis of all English local taxation, it was the occupier, and not the owner, on whom fell the duty of relieving the poor. *Cf.* in general the history of local assessments in Castle, *On Rating*, chap. 1, and a volume published by the Poor Law Commissioners in 1846, entitled *The Local Taxes of the United Kingdom*. However, under the Small Tenements Act of 1869 (32 and 33 Vict. chap. 41, §§ 3, 4), wherever the ratable value does not exceed £20 in London, £13 in Liverpool, £10 in Manchester or Birmingham, or £8 elsewhere, the owner may compound for the rate and may be assessed instead of the occupier. Furthermore, by the act of 1850 (13 and 14 Vict. chap. 99), whenever the tenancy is for less than three months, the occupier may deduct the rate from the rent. Under

Thus, not only is the occupier almost universally distinct from the owner of the building, but the owner of the building generally does not own the land. Furthermore, the building owner usually does not pay a ground rent to the original land owner, but pays only a leasehold ground rent, which changes from time to time, to the intermediary who has leased the land on a long rental and at a fixed ground rent from the original owner. In such a case the question of the incidence of rates concerns several parties, — the landowner, the leaseholder, the building owner and the occupier.[1] Such conditions, although rare, are not absolutely unknown even in American cities. Our study of the shiftings, if true at all, must be applicable equally to the simple American and the complex English conditions.

The urban real estate tax is either a pure land tax — for example, when laid on vacant lots — or a tax on both the land and the buildings. The latter is called in America the real estate tax, and on the continent the house tax; but both of these designations are, from the point of view of economics, incorrect. The continental term is wrong because the house

these two acts it has now become the practice for a part of the tenement house population, and even for the inmates of flats and apartments, to have the rates paid by the landlords. It has been estimated that this is true of about three fourths of the total *number* of occupiers. *Select Committee on Town Holdings*, 1891, qu. 955.

[1] There are four chief methods according to which houses are built in the English cities: (1) the freehold purchase system, where the builder simply buys the lot outright; (2) the freehold rent-charge system (called in Scotland the feu-system and in Manchester the chief-rent system), where the landowner sells the land to the builder and has no reversionary interest, but reserves a perpetual fixed yearly payment called the rent-charge or chief; (3) the long-building-lease system, where the builder takes a lease for 999 years, at a fixed annual rent; (4) the short-building-lease system (or London leasehold system), where the landowner leases the land to the builder, or what is known as an "improved leasehold ground rent." See *Urban Rating, being an Inquiry into the Incidence of Local Taxation in Towns.* By Charles H. Sargant. London, 1890, chap. 1. See also *Evidence and Report of the Select Committee on Town Holdings*, 1886–1890; *Local Taxation and Finance.* By G. H. Blunden. London, 1895; *The History of Local Rates in England.* By Edwin Cannan. London, 1896; *The Rating of Land Values.* By A. W. Fox. London, 1906.

tax really includes a tax on the site as well as a tax on the structure. The American term is inexact, because it confuses such entirely distinct taxes as the ground tax and the building tax, which are governed by different laws of incidence.

The value of a house, in the ordinary usage of the word, depends upon the value of the structure plus the value of the lot. The value of the structure itself is fixed by the law that governs the value of commodities the supply of which can be increased at pleasure, that is, in the long run it is equal to the cost of production, or rather of reproduction. The rent of the house proper is normally equal to the interest on the capital expended plus an annual sum which, when capitalized, will be sufficient, after paying all necessary expenses, to replace the capital by the time the house is worn out. The laws which govern the incidence of taxes on houses or on house rents are, therefore, analogous to those which govern the incidence of taxes on capital or on competitive profits. On the other hand, the value of the lot is fixed in agreement with the general principles of economic rent, according to which the price paid is measured by the superiority of situation.[1] It would be still more exact to make the assertion that the value of a city lot is determined by the general law of price which governs all those com-

[1] Pantaleoni, *Traslazione dei Tributi*, pp. 208–213, makes a long argument against confusing economic rent with the rent of a city lot. With him economic rent means agricultural rent, and is due only to the law of diminishing returns; while rent arising from situation is not economic rent, but is what he calls surplus rent (*soprareddito*). But this surplus rent is simply another name for profits. Rent proper, he maintains, arises from the fact that the priçe of agricultural products is the same while the cost of production differs. Surplus rent, or profits on city lots, arises from the fact that prices differ, while the cost of production remains the same. The English, he thinks, have improved upon the Germans and French in distinguishing between land rent and ground rent; but have not seen that ground rent is really not economic rent at all.

In answer to Pantaleoni, it may be said that there is a certain justice in his distinction, but precisely in the opposite way from that in which he understands it. It seems arbitrary to confine economic rent to the differential product of the law of diminishing returns. Since von Thünen many recent writers have developed

modities which are not susceptible of an indefinite increase in their supply.

In using the term "rent," however, we must be careful not to confuse disparate conceptions. Even in the case of the site, what is sometimes called rent is not the pure rent or the economic rent of the older writers. Just as the net returns of agricultural land may be affected by the investment of capital in the shape of improvements in the land, so the net income from a city lot may be modified by the sums spent to blast away the rock, to fill in the lot, or to construct a road (when done at private expense).[1] What seems to be pure land rent may thus be in part either interest or profits. In urban lots this is indeed apt to be of less practical importance than we have found it to be in the case of agricultural land.[2] It must, however, as we shall see, not be overlooked.[3]

While there is this risk of confusion in the case of land, the danger of error is greatly enhanced in the case of a house. The rent paid for a house is by no means tantamount to the

this idea. On the other hand, whatever truth there is in what Sidgwick calls the static theory of rent applies equally to the causes which fix the rent of a building lot. In other words, instead of applying the principle of economic rent to city lots, it would be more exact to say that the same causes which fix the differences in the value of city lots also fix those of agricultural lands, that is differences in relative situation or in relative fertility combined with differences in situation — or, in short, differential advantages in yielding net profits.

[1] So Edgeworth, referring to English conditions, says: "Even the landlord of urban sites is in the concrete not perfectly inert. The 'master's eye' produces some of its proverbial effects. If he has not supplied sewers and roads, at least he has supervised the arrangement of streets and type of houses so as to render the neighborhood attractive." — *Economic Journal*, x (1900), p. 496.

[2] See above, pp. 264, 265.

[3] Marshall (*Principles*, 5 ed., 1907, pp. 433–4) makes, or accepts, the distinction between the "public value" and the "private value" of land, meaning by the former that part of the value of land which cannot be traced to the work and outlay of its individual holders, but which is the result of "its position, its extension, its yearly income of sunlight and heat and rain and air," or a result of the action of the community. As Mr. Chorlton points out, however, the "public value" of a city lot is not necessarily its "site value." See J. D. Chorlton, *The Rating of Land Values*, 1906, p. 67, note 2. This seems to be overlooked by Professor A. C. Pigou, who accepts the nomenclature of his teacher and predecessor in office in *The Policy of Land Taxation*, 1909, chap. ii.

"economic rent" or the "pure rent" of the economists. The rental of a house is the gross rent, which includes not only interest on the sum required to purchase both site and structure (or, when the house stands on leased land, interest on the purchase price of the house plus the rental paid for the use of the land), but also repairs, necessary expenses of management, and taxes, when advanced by the owner. The house tax as found almost everywhere in Europe is therefore a tax on the gross rental of houses. In France and in Austria certain deductions are indeed permitted for the interest on borrowed capital, while in Prussia and in England no deductions of any kind are allowed, although in the latter country, where the tax is assessed on the occupier, the house rent is of course correspondingly less. When the house tax assumes the form of a tax on the selling value of the property, as in America, Switzerland and a few of the German States,[1] the matter is indeed different, for the selling value of a house is the capitalization of the prospective net income, and not of the gross rental of the property.

We may therefore consider four cases, corresponding to actual facts:

1. The tax may be levied on the site owner above, without any reference to a house tax on the building owner. This would correspond to Henry George's single tax. It would be in effect a tax on ground rents. A variation of this is the so-called tax on unearned increment or the "increment duty" as found in Germany and suggested in England.

2. The tax may be levied on the selling value of the house, irrespective of whether there is a corresponding tax on the site. This might be the case where structure and site are separately assessed.

3. The tax may be levied on the selling value of both structure and site. This is the case with the real estate tax almost everywhere in the United States.

[1] For the exact conditions in the various European states see Max von Heckel, *Lehrbuch der Finanzwissenschaft*, I (1907), pp. 280–284. For Prussia in especial see Richard von Kauffmann, *Die Kommunalfinanzen*, II (1906), pp. 334–344.

4. The tax may be assessed on the gross rent of the house — the so-called rental — and may be imposed either on the house owner — as is true of the greater part of the European continent — or on the occupier, as in the case of the local rates and the inhabited house duty in England.

It is primarily with this fourth case that the English economists have busied themselves. On the other hand, most of the foreign works have until recently paid but little attention to any of the problems discussed in this chapter.[1]

1. *A Tax on the Ground Owner*

The case of a tax levied only on the ground owner is comparatively simple. The owner who leases his land will always endeavor to get as much as possible for it. The price he gets will, in general, be entirely unaffected by the imposition of a tax. For, since the supply cannot be increased, and since there is no question of cost of production, the change in price will be effected only through a change in the demand. Now, if the demand for the site increases to such an extent that the ground rent not only covers the new tax but leaves a profit in addition, the tax cannot be shifted to the lessee. For the price would have been the same without

[1] We now have several important contributions to the discussion. In 1899 the British Royal Commission on Local Taxation published a Blue Book entitled *Memoranda chiefly relating to the Classification and Incidence of Imperial and Local Taxes* [C–9528]. This contains a general paper by Sir Edward Hamilton and a series of answers from the leading British economists and experts. This will be referred to hereafter as *Memoranda.* — Partly based on this blue book are the articles of Professor Edgeworth on "The Incidence of Urban Rates" in the *Economic Journal*, vol. x (1900), at pp. 172, 340, and 487. In 1902 Professor L. Einaudi devoted to this special subject of urban taxation of real estate an entire volume bearing the somewhat misleading title *Studi sugli Effetti delle Imposte*, but with the subtitle *Contributo allo Studio dei Problemi Tributari Municipali.* Torino, 288 pp. The recent controversies over local taxation in England have also elicited a number of discussions of the general problem of incidence, of which the most noteworthy is to be found in J. Row-Fogo, *An Essay on the Reform of Local Taxation in England*, London, 1902, esp. chap. iii, pp. 106–182. Less valuable although clearly written is *The Rating of Land Values* by J. D. Chorlton, Manchester, 1907, chap. 7. Cf. also *Local Taxation in London* by M. E. Lange, 1906.

the tax, since the demand of the lessees is not affected by a tax on the lessor. The ground owner will simply get less net return than he would have obtained had no tax been imposed — that is, the tax will fall on him. In the same way, if the demand for the site decreases, the price will diminish and the ground owner can certainly not shift the tax. Finally, if the demand remains the same, there will be no alteration of the price, and the ground owner will obtain less net income than before because of the tax. Therefore it may be laid down as a general rule that a tax laid on the owner of the site, or on ground rents, cannot be shifted.[1]

On the other hand, it must be remembered that owing to the principle of capitalization the new purchaser of the site buys himself free of tax, *i.e.*, includes in the purchase price the capitalized value of the tax. The principle of capitalization is applicable to urban lands to a far greater extent than to agricultural lands, for the reason, mentioned above,[2] that

[1] J. S. Mill, *Political Economy*, book v, chap. iii, § 6, argues that this is true only if we assume an equivalent tax on agricultural rent. He says : "If a tax were laid on ground rents without being also laid on agricultural rents, it would, unless of trifling amount, reduce the return from the lowest ground rents below the ordinary return from land, and would check further building . . . until increased demand or diminution of supply . . . had raised the rent by a full equivalent for the tax. But whatever raises the lowest ground rents raises all others, since each exceeds the lowest by the market value of its peculiar advantages."

This argument, however, assumes a slow and continuous gradation from agricultural rents to ground rents. As a matter of fact, there is almost always a sudden jump from the one to the other. One has only to look at the outskirts of the ordinary American town to be convinced of the fact that land even only prospectively fit for building sites will be kept idle sooner than be used for agricultural purposes. The whole question, moreover, has simply a theoretical interest, since agricultural lands are almost always taxed as well as city lots. Sidgwick, *The Principles of Political Economy*, book iii, chap. viii, § 8, iv, follows Mill.

Professor Marshall, who also follows Mill, considers that "this is of little importance except when a large garden attached to a house is taxed at the value of urban land." *Memoranda*, p. 117. Such cases, of course, are becoming increasingly rarer in European cities, and are almost non-existent in America. Einaudi concedes that such a progressively slow gradation as that implied in Mill's argument is exceptional. He thinks that in ordinary cases the argument in the text is true even when there is no equivalent tax on agricultural rent. *Op. cit.*, pp. 98–99.

[2] *Supra*, p. 270.

the values of urban lands are not exposed to the same sharp changes which are brought about in the value of agricultural lands by the mutations in the price of produce. Where, therefore, taxes do not change much, the burden of the tax remains relatively stable in the case of urban lands, and thus makes possible a capitalization of the tax. Hence when urban land changes hands frequently, the tax virtually disappears and becomes a charge on no one. In the meantime, however, it is the original owner, or his heir, who suffers.

While it is the general rule that a tax on the site owner cannot be shifted, there are some qualifications and seeming exceptions which deserve mention.[1] Let us take in the first place the case of a tax on occupied building sites with the absence of a tax on vacant lots. This is virtually true in many American cities where unoccupied lots are in practice assessed at much lower figures than improved sites ; and it is quite true in England where unoccupied sites are not assessed at all to local rates. In this case, provided that the city is growing and the demand for house accommodation increasing, every site that is held vacant for speculative purposes checks the building, and hence the supply, of houses in that particular locality. To the extent, therefore, that the speculative site owner will be induced to sell or to lease his land for building purposes only on payment of a considerably augmented purchase price or rent, the effect of the exemption or the lower assessment of vacant sites will be to keep rents higher than they would otherwise be. A special tax or a practically higher rate on improved sites only tends, therefore, to be shifted to the owner of the building on the improved site and is by him rolled off on the occupier. There is, hence, much to be said in defence of that portion at all events of the programme of the reformers in the United States who object to the exemption

[1] Pantaleoni, *op. cit.*, pp. 218–221, thinks that where a heavy site tax creates a combination between the landowners in a given section of the city, the tax will be shifted to the tenant. But as Einaudi shows, *op. cit.*, pp. 93–95, not only is the tax very unlikely to create such a combination, but even if it did, there would be no shifting to the tenant.

or under-assessment of vacant sites as responsible, in part at least, for the high rents paid for house accommodation.[1] Where, as in England, vacant building land is entirely exempt[2] from local taxation, it is evident that one of the reasons for the demand for the rating of site values is to reach the owner of the vacant lot, and thus to diminish the pressure for house accommodation and the resulting congestion in the slums.[3] In fact, the proposition has even been made in England and indorsed by the Royal Commission on the Housing of the Working People to levy a special tax on vacant building ground.[4]

[1] This point is well put by Lawson Purdy, *The Burdens of Local Taxation and Who Bears Them*, 1901, p. 27. "Where there is speculation in land, a tax upon land affects the market supply of land, and therefore affects the price of land. In the absence of any tax, valuable land is held out of use at prices higher than it is worth for present use. When the supply is thus restricted, the price of all land for rent or sale is increased, a tax upon land in proportion to its value, as it is high or low, more or less, forces into use valuable land held idle in expectation of a rise in value. When the market supply of land is thus increased, the price of land is decreased."

[2] In England unrented houses are also exempt. But, obviously, unrented houses, especially in growing towns, are the exception; while unoccupied building sites are common.

[3] *Cf.* the argument in *The Rating of Land Values.* By A. W. Fox, 1906, p. 13. See also the evidence of Fletcher Moulton, the chief statistician, and B. F. C. Costelloe, the chairman, of the Local Government and Taxation Committee of the London County Council, before the *Royal Commission on Local Taxation* in vols. ii and iv of the *Minutes of Evidence.* — Sargant, one of the chief opponents of the scheme, takes in his work on *Urban Rating* the mutually inconsistent positions that the rating of vacant building land will encourage the "jerry" builder (p. 113), and will "throw it more into the hands of the rich" (p. 145). His references to the United States are vitiated by his ignorance of the fact that vacant building land is almost universally underassessed, and by his confusing the taxation of capital value with a tax on personal property.

[4] Professor William Smart, in discussing this proposal, seems to lean, although with some misgivings, to the view of Sargant as outlined in the last note: "Whether it [the special tax on vacant building sites] would 'force land into the market for building' may be doubted. It would of course tend to force its sale, but, as the sale would be at a reduced price owing to the impending tax, it might force it only into the hands of other and wealthier holders." — *Taxation of Land Values and the Single Tax*, 1900, p. 95. The other objections, that it would prevent suburban gardens and militate against any well-considered "feuing" plan, as in Scotland, are of more weight.

A second point, although of minor importance, may be raised. Suppose that the tax rate is uncertain and, as in New York city of late, increasing rapidly from year to year. To the extent that the increased rate may be deemed permanent, the tax will of course be capitalized and will reflect itself in a diminished value of the land. But the very uncertainty of the outlook may tend to dissuade intending house builders from buying the sites at prevailing prices; and this hesitancy on their part will, where population is increasing, obviously mean a relatively diminishing supply of house accommodation. The uncertainty of the tax rate on land may therefore lead to a slight increase in house rents, so that the burden will be borne, to this extent at least, by the occupant of the house rather than by the owner of the site.[1] Obviously, however, there is a limit to the possible increase of the tax rate, a limit which under American conditions is ordinarily fixed by constitutional restrictions.

Finally, we must mention the case where an entire town or part of a town is practically created by individual or corporate initiative. Examples of this are, on the one hand, such towns as Gary and Pullman in America or Saltaire in England, and on the other hand the by no means exceptional construction of a factory together with workingmen's dwellings by an industrial enterprise, or the laying out of a new section of a city by an improvement or an investment company. In such cases, where the prairie or agricultural land is plotted, sewered, paved, curbed, and generally improved by the capitalist investor, virtually the whole value of the land, or at all events the large surplus over the prairie or agricultural value, may be regarded, for the time being at least, as the result of the capital invested; and the rent as equivalent

[1] This contingency is also contemplated by Edgeworth in the *Economic Journal*, x (1900), pp. 509–510. He in our opinion, however, ascribes too much importance to the point. It is also emphasized by Sargant, who puts the case too broadly when he states that it "would prevent secured interests in houses from being arranged so as to yield a fixed income, and so would drive cheap or trust capital out of house property and raise rents." — *Memoranda*, p. 216. *Cf.* also Einaudi, *op. cit.*, pp. 80–83.

to the interest or profits on the capital.[1] The imposition of a tax on the site may in such a case lead to its being shifted to the tenant, as otherwise the return on the capital might be insufficient to tempt the intending investor.[2] Since the tax, however, must be deemed to be a tax on the capital invested rather than on the land itself, the incidence of the tax is subject to the qualifications discussed below in the sections devoted to the taxation of capital in general or of houses in particular.[3]

With these three minor exceptions, then, it may be stated that a tax on the site, whether it be levied on rental value or on capital value, is borne by the owner of the land.

Instead of being imposed on capital or rental value, however, the urban land tax may assume the form of a so-called increment tax, assessed on the difference between the present selling value of the land and its value at some previous period.

There can, of course, be no question but that the incidence of such an increment tax is on the landowner.[4] But where, as has sometimes been proposed, the tax is applied to vacant spaces only,[5] or where vacant lots are taxed at a higher rate than improved lots, the ulterior consequences of the first imposition of the tax will be to force some of the vacant land

[1] *Cf.* Marshall, *Principles of Economics*, 5th ed., 1907, pp. 444–445, book v, chap. ii, § 2.

[2] *Cf.* Einaudi, *op. cit.*, pp. 101–102.

[3] *Infra*, chap. iv.

[4] For a discussion as to how much of the tax, if any, is shifted back to the original owner through capitalization, see C. F. Bickerdike, "The Principle of Land Value Taxation" in *The Economic Journal*, xxii (1912), 1–15; J. C. Stamp, "Land Valuation and Rate Reform," *ibid.*, xxi (1911), 18, and "The Incidence of Increment Duties," *ibid.*, xxiii (1913), 194. *Cf.* Y. Scheftel, *The Taxation of Land Value*, 1916, cap. vii, and C. C. Plehn, "A Study of the Incidence of an Increment Value Land Tax" in *Quarterly Journal of Economics*, xxxii (1918), 487–506. Among German contributions on the subject, perhaps the most noteworthy are H. Kopp, "Ist die Wertzuwachssteuer überwälzbar?" in *Finanzarchiv*, xxxii (1906), pp. 1–12, and P. Weyermann, "Die Ueberwälzungsfrage bei der Wertzuwachssteuer" in *Annalen des deutschen Reichs*, 1910, 881–892.

[5] *Cf.* above, p. 284, where the proposition to tax vacant sites took the form both of a tax on capital value and of an increment tax.

into the market, and thus to decrease house rents throughout the entire building area. After the tax has been in operation for some time, and when all land is improved as soon as it becomes "ripe for building," the new equilibrium will have been reached, and a special increment tax on vacant sites will exert no further effect on the house occupant.[1]

2. *A Tax on Value of the House*

Let us next take up the case where the tax is assessed on the value of the house and imposed on the house owner, irrespective of the question whether he is the landowner. In other words, let us deal with the tax on the structure, or, if the tax is not levied according to capital value, with a tax on net building rent as opposed to that on ground rent.

The generally accepted doctrine — that of Adam Smith, Ricardo and Mill — may be expressed as follows: Buildings represent the investment of so much capital and labor. They require an outlay for construction, for maintenance, for repairs, for insurance. No one will enter on the business of having houses built for investment unless he can count on a definite return, which must in general be equal to the returns from capital invested in undertakings of approximately the same nature. A tax imposed on the owners of the building will therefore generally be shifted to the occupiers; for, if the tax could not be shifted, it would reduce the profits of the owners below the customary level in similar investments. The result would be a cessation of building operations, a consequent scarcity of houses and a gradual increase in the rent or value of existing houses, until the margin became high enough to tempt the investor into further operations. The working of this law of the transferability of capital is, of course, slower here than in the case

[1] This is overlooked by Einaudi, *op. cit.*, p. 113, who, moreover, unduly complicates what is at bottom a very simple phenomenon, and who introduces into his discussion all sorts of hypothetical cases which never happen. *Cf. e.g.* his treatment of an increment tax on occupied sites to be levied only when the old buildings are demolished or repaired. *Op. cit.*, pp. 118–119. See below, p. 317.

of quickly consumable commodities; for since houses are more or less permanent, we cannot assume an immediate diminution of supply. Given a stationary supply of houses, their value or their rent will rise only with the slow increase of population, that is, with a relative diminution of the supply. But in the long run the working of the law is inevitable. Such a tax will, therefore, be shifted to the consumer, that is, to the tenant.

This doctrine, which may be called the orthodox opinion, requires qualification in some particulars. The two chief reasons why the theory of the inevitable shifting of the house tax to the tenant is not always true are as follows: (1) a distinction should be drawn between new and old houses; and (2) another should be drawn between general and exclusive taxes.

In the first place, a distinction should be drawn between houses already constructed before the tax is imposed or increased and those built after the imposition or increase of the tax. It may be argued that, since a tax on new houses is always shifted to the occupier — for otherwise they would not be built — the same reason applies to old houses; for a scarcity of houses will affect the values and rents of all houses, whether new or old.

This argument, however, is not convincing. Suppose that a town, or a portion of a town, is for some reason decaying. In such a case, the values and the rents of existing houses will of course fall. The owners of existing houses cannot, at first, escape bearing the burden of the tax. They cannot shift the tax to the ground owners, for since the structures are already on the land, presumably under long leases, the ground owners cannot be compelled by competition to reduce their ground rents. Until the expiration of the lease the house owner certainly cannot shift the tax to the ground owner. On the other hand, the house owner will not be able to shift the tax on the occupier, because no actual diminution in the supply of houses is possible, and because, by the supposition, there is no increase in the demand, but rather the

reverse. Not until a condition of stable equilibrium has been reached will the building owner cease to bear the burden. That is to say, it will not be a question of equality of profits, but simply one of the existing relations of demand and supply. Hence, if population is stationary or declining, a tax on existing houses (and there will, of course, be no new houses, because there will be no demand for them) will inevitably fall on the house owner. Furthermore, if he sells the house he will lose the capitalized value of the decrease of rent; so that, under the theory of capitalization, only the original owner will bear the tax until there is a still further decline in population, when the process will repeat itself.[1]

Although the condition just described may be considered in some sense exceptional, it actually occurs in all communities at periodically recurring intervals. And although the reasoning would not be applicable to the general conditions of progressive society where new houses are being continually built, the distinction is of sufficient importance to invalidate the hard and fast rule of the older economists.

Another objection, which is, however, less tenable, has recently been raised against the older doctrine. Pantaleoni in Italy and Sidney Webb in England maintain that a tax on the building owner tends to be shifted, not on the tenant, but on the ground owner. Pantaleoni claims that this must necessarily happen because, if the tax were to fall on the house owners, they would build no more houses, and would thus effect a decrease in the demand for building

[1] This is of course true only on the assumption which governs this whole section that the tax is an exclusive tax, or that the rate of the tax is higher than on other property. Einaudi, who agrees that the doctrine "is exact only within these limits," forgets (*op. cit.*, p. 136) that these are precisely the limits set by me. Einaudi also seeks to draw a distinction between decaying and stationary cities. With his fondness for hypothetical examples he takes the case of a city in which the population changes neither in number nor in wealth, and discusses at length what will be the result of a tax in the case of new houses only (*op. cit.*, pp. 136–137). But he forgets that with a stationary population there will be no new houses, except, indeed, in the very rare cases when a house has completely decayed or is destroyed by fire. And there does not seem to be much use in discussing the incidence of a tax levied exclusively on such houses.

lots, which would result in a depreciation of the value of the land.[1]

This argument seems to rest on a misconception. It is, indeed, true that the building owners will not bear the tax. But what reason is there for assuming that the mere cessation of building operations, which would ensue on the imposition of the tax, will cause a depreciation in the value of the lot? The non-construction of new houses cannot, of itself, cause the ground rents of existing houses to fall; it can only prevent a further increase in the value of the land, or perhaps, at most, bring about a fall in the value of vacant lots. Until the old leases run out, the ground rents of occupied lots are not apt to fall, even if population, and therefore demand, diminishes. Much less will they fall if simply a tax is imposed. Even after the old leases run out, the ground rents will not fall unless the taxes on the houses are so extraordinarily high that the building owners, who have the privilege of renewal, will prefer to abandon their houses entirely rather than to renew their leases. Only in this most exceptional case[2] can the building tax be shifted in part on the ground owner. If, indeed, the law of real estate were changed so that fixtures to the land would not go with the land, and if houses could easily be removed from plot to plot, then, but only then, would it be true that a building tax could always be transferred to the ground owner in the shape of decreased ground rent.[3]

Mr. Webb's argument is equally inconclusive. He maintains that the ground landlord does not occupy a fixed position. Land in the neighborhood of a city has only an agricultural value until it becomes ready for splitting up into building plots. But the value of such land, says Mr. Webb, does not pass imperceptibly from agricultural value to building value.

[1] Pantaleoni, *op. cit.*, pp. 221–223.

[2] This exceptional case is virtually the one mentioned by Professor Edgeworth in his example γ in the *Economic Journal*, vii, p. 65. He expresses it a little differently, making the exception consist in the fact that the tax is equal to the original ground rent plus the constant building rent.

[3] For a criticism of a similar argument of Pierson, see below, p. 300.

By custom there is almost always a great jump. The landowner, who can in any case get a price much larger than the agricultural value, Mr. Webb continues, has a fixed point of resistance. He will be willing to take a little less than before the imposition of the tax, since it is merely a question of competition between the builder and the owner of land available for building. Hence the incidence of a tax on houses will be the same as that of a tax on land — namely, on the landowner.[1]

This argument seems to be fallacious because it ignores the fact that the ground owner is in the stronger position. As between the landowner and the tenant, the tenant is the weaker party.[2] The house builder knows in normal cases of increasing demand that he can more easily raise rents (since demand increases) than compel the ground owner to take less than the market value. The landowner is not compelled to part with his land; but the tenant is compelled to occupy some apartments.[3]

It would, therefore, in the main be true that, given the normal conditions of progressive society and the continued existence of prosperity — and apart from the qualification to be noticed below — the tax on the building owner is shifted. And since, as we have just seen, the tax cannot be shifted to the ground owner (except in the rare case mentioned),[4] it will tend to be shifted to the other party in interest

[1] Webb, in *Report from the Select Committee on Town Holdings*, etc., 1890, qu. 42–44, pp. 5, 6.

[2] Bastable, *Public Finance*, book iv, chap. ii, § 5, as well as Edgeworth, *Economic Journal*, vii, pp. 66–68, seems to overlook this in expressing the opinion that the tendency is for the tax to be shifted to the ground owner. Graziani, *Istituzioni*, p. 362, agrees with the argument in the text as over against Pantaleoni and Webb.

[3] For a fuller proof of the validity of this statement, see below, p. 313.

[4] Professor Bastable advances another case: "It may happen that the premises, owing to the situation, command a monopoly value, in which case the owner, having obtained the highest possible rent, must submit to pay the public charges; the mere building owner will recoup himself at the ground landlord's expense." — *Public Finance*, book iv, chap. ii, § 5. But why should the landowner take less? The building owner is in the weaker position, for his building is on the land, and under the law goes with the land. Moreover, as is pointed out below, p. 307, there is no such thing as a strict monopoly value of a lot.

— the occupier. In other words, given an increased demand for house accommodations, the rents of existing houses will rise until the supply of new structures is equal to the demand.

It may be said that in the mean time the house owners have a practical monopoly. Theoretically, indeed, the house owner himself would during the interval bear the tax if the rise of rents were due solely to increase of population, because in the face of this increased demand he could have obtained the same rent, had the tax not been imposed. In other words, as in the case of all monopolies where the price depends largely on the purchasing power of the consumer, the tax would simply mean a diminution of the otherwise greatly enhanced profits to the house owner.[1] Practically, however, there is never such an interval in progressive communities. Houses are built continually, and if there is temporarily any deficiency in the supply, it is owing to the decreased profits of the house owners. In order that these profits may be maintained, the tax on new houses must fall where alone there is a margin for it — that is, on the rent paid by the occupier. But since the rents in the new houses fix the standard of rents in the old houses (allowance being made for the superiority of situation, which, however, has nothing to do with the building rent, but only with the ground rent), the owners of both old and new houses are able, in the normal cases here cited and in the long run, to shift the burden to the tenants. It must, however, be remembered that this is true only in the normal cases and in the long run.

The second qualification of the doctrine that the building tax will be shifted to the occupier rests on the distinction between a general and an exclusive tax. The whole argument up to this point has been conducted on the assumption that the house tax is a special or exclusive tax. As soon as other forms of capital or other profits of investments also are taxed, the entire basis of this argument falls away. This

[1] This is the case mentioned by Ricardo, *Principles*, chap. xiv, par. 2; by John Stuart Mill, *Political Economy*, book v, chap. iii, § 6, par. 3; and by Professor Edgeworth, *Economic Journal*, vii, pp. 50–52.

has been frequently overlooked by those who have attempted to draw practical conclusions from the theories of the classical economists. The doctrine of the shifting of a house tax to the occupier depends on the assumption that would-be house builders will otherwise prefer to put their money in non-taxable investments, thus bringing about a scarcity of houses and an increase of rents. But if other capital or profits are also taxed, there will be no reason for refusing to invest in houses. Hence rents and values will not rise, and the tax cannot be shifted. In other words, when a house tax is part of a system of taxation which reaches all other kinds of property or income, and taxes them at the same rate, the incidence of the tax will always be on the original taxpayer — that is, the house owner. His profits, like those of all other capitalists, will be reduced by the tax. So, again, if house property or house rents are taxed at a higher rate than the property or profits of other classes, only the surplus above the average rate of the tax will be shifted to the occupier, and that only in the normal cases already mentioned.[1]

Our conclusions may be summarized as follows: If a tax is imposed on the building owner, it will remain on him when population decreases or is stationary, or when the locality decays. It will be shifted to the ground owner only when the diminution or decay is so great and the taxes so high that the building owner will voluntarily relinquish the house rather than renew the lease. It will be shifted to the occupier under normal conditions of advance in economic welfare so far as the tax is exclusive. Otherwise only so much will be transferred to the occupier as exceeds the usual rate for other property or profits, while the remainder will fall upon the house owner. The exact proportions depend upon the general system of taxation in each country or epoch, and upon the particular conditions of the individual case.

[1] The theory of capitalization of incidence is not applicable here, although, remarkable to say, it has been attempted by Myrbach, "Die Besteuerung der Gebäude und Wohnungen in Oesterreich," *Tübinger Zeitschrift für die gesammte Staatswissenschaft*, vol. 41, esp. p. 409.

3. *A Tax on the Owner of House and Ground*

We next come to the third case, where the tax is levied on the ground owner who is at the same time the house owner, and is assessed on the selling value of both site and structure. This is the common American system of the real estate tax. The problem is in this case comparatively simple, as we need only to combine the conclusions arrived at in the two preceding cases.

So far as the real property tax may be resolved into the site tax and the building tax, the tax on the land when assessed on the landowner will tend to remain, as we have seen, where it is first put. The incidence of the ground tax, in other words, is on the landlord. He has no means of shifting it; for, if the tax were to be suddenly abolished, he would nevertheless be able to extort the same rent, since the ground rent depends primarily on the demand of the occupiers. The tax simply diminishes his profits. It must not be forgotten, however, that, as has been pointed out above,[1] there are minor qualifications of the general doctrine of the non-shiftability of the tax on the site.[2]

The incidence of the house tax, on the other hand, is fixed by the rules laid down above. The question, therefore, as to how far the real estate tax is shifted to the occupier in American cities depends partly on the actual existence or non-existence of a general property tax, partly on the relative

[1] *Supra*, pp. 283–285.

[2] Mr. Edgar J. Levey questions, in the *Political Science Quarterly*, vol. xxiv (1909), pp. 45–51, the statement that the site tax cannot in general be shifted to the tenant. As is pointed out, however, by Mr. Louis F. Post in *The Public* (Chicago), vol. xii (1909), pp. 365–370, the argument of Mr. Levey involves a misconception. With reference to the elements of friction which enter into the problem, Mr. Levey calls attention (*op cit.*, p. 48) to immobility of invested capital, long leases at fixed rentals, varying conditions in the building trades, and centrifugal and centripetal forces of racial and family ties in old and newly formed tenement districts. Some of these points are alluded to below in the discussion of a tax levied on the gross rent of houses. The general conclusions of Mr. Levey as to the ultimate incidence of an urban tax on real estate in general are in substantial agreement with those expressed in the text.

value of the house and the lot, and partly on the peculiar circumstances of the particular piece of property.

If our general property tax were actually enforced, the real estate tax would beyond all doubt be borne entirely by the owner. But in American cities the general property tax has become virtually a real property tax. In other words, city real estate bears the greater part of the weight of municipal taxation. In proportion as city houses are taxed at a higher rate than other capital, the main condition under which the tax *may* be shifted to the occupier is present. If we take the small American towns where the investments are mainly local and where personal property is reached to a fairly high degree, it is very probable that the real estate tax is not shifted to the occupier. But the larger the city, and the greater the chances of investment outside, the less will be the proportion of personalty taxed, and the greater will be the possibility of the shifting of a part of the real estate tax to the tenant.

The possibility that the tax may be shifted turns into a probability when we remember that the building tax tends to form the greater part of the total tax. The average dwelling-house in New York city, for example, is worth, when first built, from two to three times as much as the lot. In the tenement house districts the proportion is slightly, if at all, less, except in the case of the tumble-down wooden houses, which are fast disappearing. It is true, of course, that with the passage of time the value of the house tends to decline, while that of the lot tends to increase. From this it might be inferred that the real estate tax falls mainly on the owners. But this tendency is materially counteracted by the fact that, as sites become more valuable, owners are apt to tear down the old structures and to erect more expensive, and therefore more lucrative, buildings. Even in the crowded business centres it is now becoming the custom to erect vast buildings whose value in some cases considerably exceeds that of the ground on which they stand.

Finally, remembering the qualifications laid down above, it

may be said that, while the real estate tax falls on the owner in case of a stationary or a declining population, a considerable portion of the tax is shifted to the tenant, in normally prosperous town or city districts, under the present administration of our property tax. When we reflect that in the city of New York over three-quarters of the population live in tenement houses, we are thus forced to the conclusion that in the great cities a great share of American local taxation is to-day borne by those least able to pay. The greater the extent, however, to which the existing real property tax is being generalized or supplemented by other taxes designed to reach the real ability of the taxpayer, the less probable will be the original shifting of the tax to the occupier. The reforms in the general conditions of American local and state taxation will thus indirectly affect many classes who at present think that they have nothing either to gain or to lose by the process.

The question finally arises as to the ulterior effects of a tax which is shifted to the occupier. To answer this question, which is a part of the larger problem of the taxation of property, profits and wages, to be discussed in subsequent sections, it is necessary not only to distinguish between dwellings as opposed to shops, offices or factories, but also in the former case to differentiate between the working class population on the one hand and the middle and higher class population on the other.

When the tenant is the occupant of a shop or business office, the tax must be regarded as one on production rather than on consumption. For the amount of rent paid is a charge on the business or occupation of the same nature as insurance and other expenses. The tax will therefore be apt to be shifted to the purchasers of the commodities produced or services rendered, for the marginal producer can obviously not afford to remain in that business unless his outlays are at least covered. In the case, however, of a new, or suddenly increased, tax the shifting of the burden to the consumer may be affected by the character of the business and the nature of

the demand. Thus, here again, there is no justification for the optimistic theory of diffusion.

Where the demand for the commodity is somewhat less elastic, the occupant of the factory or store may endeavor to reduce expenses by diminishing the size of his premises, rather than to add the entire tax to the price. Moreover, an important consideration which may prevent the shifting of a tax to the consumer is whether the article produced is essentially local in character or is sold in competition with similar articles produced elsewhere. In the latter case that part of the tax which is common to all the producing centres would be shifted to the public. And even as to this portion of the tax, the qualifications mentioned above in connection with a tax on agricultural produce [1] will be applicable in the case of commodities which are subject to periodical and sharp oscillations of price. In general, however, it may be expected that a tax on business rents will be of the nature of a tax on gross output, and subject to the law of incidence discussed below,[2] in conformity with which the tax is ordinarily shifted to the consumer.

At the other end of the scale from tenants of shops or business premises are the occupants of better-class dwellings. Here the real estate tax must be regarded as in the nature of a tax on income, or at least of a tax on expenditure viewed as a rough criterion of ability to pay. The amount expended on house rent by an occupier of this class has only a most indirect connection with his business activity. If he is prosperous he will spend more on house rent; but his prosperity is after all a result, and not a condition, of his business activity, and is not reflected in the prices charged for the commodities which he produces. In such cases the tenant is the ultimate consumer.

Between these two extremes lies the mass of the working population. In one sense the rental paid by a workman may be likened to that of other occupiers of dwellings, and

[1] *Supra*, pp. 264 *et seq.* [2] *Infra*, chap. v, § 1.

a tax on rentals would then be a rough index of income. On the other hand, however, it is perhaps more legitimate to regard the house rent of a laborer as one of the necessary elements in expenditure which go to maintain his efficiency, and which should hence more properly be considered as an item on the side of production, rather than of consumption. Viewed in this light, a tax on house rent would be equivalent to a tax on wages or on the necessaries of life. In its broadest aspects such a tax, as we shall see later,[1] may be considered as susceptible of being shifted onward, and generally diffused. It is well established, for instance, that wages are higher in New York city than in a small community, largely because of the higher standard of life, or the increased scale of expenditure in the larger city, the most important part of the difference being due to the factor of house rents. Here again, however, we must be mindful of the warning given below[2] and reflect that where wages are not at the minimum of existence, a tax on the necessaries of life may be only partially compensated by a rise in wages, and that the resulting burden on the wage earner is frequently appreciable.

4. *A Tax on the Gross Rent of Houses*

We come finally to the tax on the gross rent of houses, or on what is ordinarily called house rentals. The rental paid for a house is not the net rent, any more than the rental paid for a telephone represents the net return of the investment. The rental of a house is the gross rent, from which there must be deducted expenses of maintenance, repairs, insurance and the like, in order to ascertain the net rent. Since the selling value of the house is a capitalization of the net rent, and not of the gross rent, there is a difference between a tax on capital value and a tax on the so-called rental of a house.

As was stated above,[3] the house tax, as it is found almost everywhere in Europe, is a tax on gross rent. In most of

[1] *Infra*, chap. vi. [2] *Infra*, chap. vi. [3] *Supra*, p. 280.

the continental states it is imposed on the owner of the house; in Scotland it is divided between the owner and the occupier; in England it is imposed, with the exception noted above,[1] on the occupier. This is true not only of the national tax, known as the inhabited house duty, but of the entire system of local rates. The English system is the more complicated one, because the problem of incidence is not only as between the occupant and the owner, but as between the occupant, the house owner, and the site owner; and when the interests of the land are divided, as between the ultimate reversioner, the lease holder, or the other beneficial participant in the land. We shall accordingly make the English tax the basis of our discussion. The general rules of incidence are indeed the same whether the tax be paid in first instance by owner or by occupier; but important modifications of the general theory may be brought about, as we shall see, by the existence of friction, which will put a different complexion on the practical results.

The discussion as to the incidence of the local rates in England has led to heated political controversies, and has been embittered by the fact that the welfare of the landlords, or other parties in interest, may be adversely affected by the conclusions if embodied in legislation. The treatment of the subject by the economists, on the other hand, has sometimes been beclouded by an over-refinement of argument, resulting in what has been wittily called the "goodness-knows-who" doctrine.[2] Let us attempt, in the following discussion, to conform to economic principles without exposing ourselves to the rigor of the above strictures.

[1] *Supra*, p. 276, note.

[2] "The economic theorist's answer to the question: Who pays rates? is, that deceased landlords, landlord and tenant, all pay rates, and that the proportions in which they respectively do so vary not only from place to place, but according to an infinite number of circumstances, most of which are incalculable, and incapable of being expressed in definite terms. Briefly expressed, it is simply this: Goodness knows. For practical purposes this answer is useless. It is impossible to produce a scheme of finance if the taxpayers are goodness knows who."—J. Row-Fogo, *An Essay on the Reform of Local Taxation in England*, 1902, p. 110.

Before entering upon the general argument it may be well to call attention to an infelicity of treatment which is not infrequently found among the earlier economists. Many writers, from the time of Adam Smith and especially since John Stuart Mill,[1] mindful of the distinction between ground rent and building rent, have attempted to divide the tax on house rentals into two portions, the one being the tax on the site, the other the tax on the building. They have then proceeded to work out separately the incidence of each of these two portions of the tax and to combine them at the end. This method of procedure, however, seems inappropriate chiefly for the reason that we are seeking to combine what are essentially disparate things. The rent of the site is the net rent; but the rent of the house is the gross rent. To attempt to separate the entire rental paid for a house into the net rent of the land and the gross rent of the building is therefore as ill-advised as it would be, in discussing a tax on pianos, to divide it into two parts, one of which corresponds to the rent of the land which produced the raw material. A house is a commodity which cannot be occupied without enjoying the use of the land on which the house is situated; just as a piano is a commodity which cannot be utilized without the enjoyment of something which is also ultimately due to the services of the soil. In the case of the house the service afforded by the land is an immaterial one, that of support; in the case of pianos the service of the land incorporates itself into the material shape of lumber. There is as little reason in the one case as in the other to attempt to divide the tax into two parts. If pianos in a certain community are usually

[1] *Political Economy*, book v, chap. 3, § 6. *Cf.* Sidgwick, *Principles of Political Economy*, book iii, chap. viii, § 8, and more recently Courtney in *Memoranda*, p. 86: "So much of the house duty as was proportioned to this [the ground] rent and, so to speak, attached to it, would be ultimately borne by the person entitled to receive this rent." *Cf.* also Marshall, *Principles*, 5th ed., p. 453, book v, chap. 11, § 7: "The rent of a house is a composite rent, of which one part belongs to the site, and the other to the buildings themselves."

rented, a tax on the person who uses the piano is in this respect precisely like a tax on the occupant of a house, and it would surely be inappropriate to divide the piano tax into two parts, one of which was the ground rent and the other the piano rent.[1] In the case of a tax on the selling value of the house, discussed in a previous section, it was permissible to differentiate the tax into the two constituent elements of the tax on the house proper and the tax on the site, because it is entirely practicable to separate the house from the site. A house can be sold to be removed or torn down, without the owner parting with the land. But a house cannot be rented, unless the occupant at the same time utilizes the services of the land; in renting the house, he is renting the land. In discussing the incidence of a tax on house rents, therefore, it seems best to treat it as a whole.

Taking up then the question of the incidence of local rates, it may be said that in general, in case of progressive communities, the owner of the building may be eliminated from consideration. By universal consent it is agreed that where the tax is an exclusive tax (as in the case of the local rates) or a special tax (as in the case of the inhabited house duty) the building owner will not bear any part of the burden. For if his profits were reduced, building operations would cease, until the shortage in the supply would again cause house rents to rise. The argument is precisely similar to the one mentioned above [2] and subject to the same qualifications in the case of non-progressive or decaying localities.

[1] *Cf.* Edgeworth, *Economic Journal*, vii (1897), pp. 65–66, and x (1900), pp. 190–193. I cannot, however, agree with Professor Edgeworth when he makes his opposition to the older doctrine turn upon the fact of an equal degree of elasticity of demand in the case of houses and of ordinary commodities. See the next paragraph.

[2] *Supra*, pp. 288–293. For another, but hypothetical exception, see below, p. 292. Still another possible exception is mentioned by Professor Edgeworth in *Economic Journal*, vii, p. 68, following Pantaleoni : "Perhaps the investments which are open as an alternative to the intending builder are not indefinitely extensive in comparison with the house-building industry," in which case the

The real problem, therefore, is as to whether the local rate falls on the occupier or on the landowner. By some it is held that the local rate is borne entirely by the landowner. The argument would be something like the following.

The tax will be shifted in first instance by the occupier to the house owner, it is said, because, when the tenant takes out his lease, he will make a deduction, measured by the height of the tax, from his rent. He will offer only so much rent as is warranted by the superiority of the site; and this superiority is not increased by the imposition of a tax. To this extent, then, the tax will fall on the house owner. But the building owner will shift the tax to the owner of the land. As Goschen has put it: "The builder calculates on a certain profit, or else he would not build; he knows that tenants of a certain class can afford to give a certain rent and no more for a certain kind of house; and therefore if building is to take place at all, it is clear that the rates must fall there where alone a margin exists to bear them; that is to say, on the price given, or ground rent promised to the owner of the soil."[1]

The contention, however, that the tax falls wholly or necessarily on the ground owner is obviously incorrect in at least two particulars. In the first place, the ground rent might be so low and the rates so high that the builders could not afford to erect any more houses. They could not hire the land for any less, because the ground rents would be so low that the owner would prefer to use the land for other purposes rather than submit to a reduction. The result would be a diminution in the supply of houses and a consequent rise of rent to the tenant or consumer. This first

house builder will be "obliged to submit in consequence of the house tax to some permanent reduction in profits." But as Professor Edgeworth himself says, this is very "pure theory." In practice it never happens. Einaudi also discusses this in several places.

[1] Goschen, "Draft Report," etc., *op. cit.* (*cf.* for title, *supra*, p. 273, note 1), p. 166. The same idea is shared by others. The evidence given before the Select Committee on Local Taxation in 1870 contains every possible view. *Cf.* esp. questions 1276, 2731, 2739, 3211, 3404 and 4050.

condition, however, will arise very rarely, and may be passed over as unimportant.[1]

Secondly, the argument that the tax falls on the landowner rests on the assumption that at the beginning of every lease the lessee will demand that allowance be made for the tax. This assumption is, however, not of much use in the case of long leases. After a long lease has been taken out, an unexpected change may occur in the rates; in fact, the growing tendency of modern local taxation is toward an increase. The landowner who has fixed the ground rent for a number of years will still get this rent, irrespective of any growth of rates. The increased burden cannot then be shifted on him; it must be borne by the occupier who advances the tax. Not until the expiration of the lease will the tenant be able to make a new arrangement by which he will try to shift the burden on the owner. Thus, only in the case of short tenancies, could it happen that the tax would fall on the owner. In all those cases — especially numerous in England — where the occupier rents for a term of years, the excess of any rates beyond the amount calculated in the original lease necessarily falls on the occupier.[2] The important point to be noticed is the time of the *original* imposition of the tax — a point too often neglected. If the owner were assessed for

[1] Mr. Goschen himself makes allowance for this.

[2] *Cf.* Professor Edgeworth's remarks in reference to the project of dividing the rates between the owner and the occupier: "So far it has been supposed that occupiers' leases are short, otherwise it would not be true that division between occupier and owner is a small matter. It is not true of a twenty-one years' lease, such as not uncommonly occurs in the case of high-class residences, open to the tenant only, but not to the landlord, to terminate at the end of seven or fourteen years." *Economic Journal*, x, 490. So Mr. Costelloe in his testimony before the *Royal Commission on Local Taxation* states that as a rule the "pull of the market" is against the tenant, and that the recent continual increases of rates "do, in fact, come out of the pockets of the occupiers and out of their living, and that they cannot be fairly considered as being borne in any intelligible sense by the receivers of rent." See questions 19923–5, 20252–60 and 20433–8, and vol. ii of *Minutes of Evidence*, app. no. xi, pars. 48, 49. For the views of the witnesses in general on this point see the summary in A. W. Fox, *The Rating of Land Values*, 1906, pp. 24–30.

the taxes in first instance, as on the continent, the case might be different. But if the occupier advances the tax, he cannot improve his condition until the expiration of the lease.

Apart from this consideration, however, how does the matter stand with a tax assessed on the occupier in the ordinary case of short leases? In the preceding paragraph it has been taken for granted that at the beginning of each short lease the tenant will insist on a reduction of the rent as a compensation for the local rates assessed upon him. Only on this assumption will the owner ultimately bear the taxes. But is this assumption always correct? The real question is: Who bears the taxes in the case of short leases or tenancies by the year, the quarter, or — as is the case with the majority of the tenement house population — the month or the week?

Even in the case of short and easily readjustable leases, the contention that the local rate falls entirely on the landowner ignores the many reasons which tend to make the tax rest on the occupier. Accordingly the great majority of scientific writers agree that a part of the tax will be borne by the occupier, and claim only that the remaining portion of the tax will settle on the landowner. Even with this contention, however, we must take issue. For it is in our opinion susceptible of proof that in ordinary cases the tax will be borne entirely by the occupier, or at all events that only an insignificant part, if any, and a part far smaller than is generally supposed, will rest on the landowner.

Let us lead up to the ordinary case by considering first the exceptional or extraordinary cases. If we take a broad view of the situation, we shall find that there are really three important possibilities.[1] These may be summed up as:

(*A*) where the supply of building lots is abundant, as in the suburbs or in sections of dwindling prosperity, where there are many unrented houses or at all events where it does not pay to build any more houses; (*B*) where the supply of buildings on new lots just about keeps pace with the demand;

[1] For the unimportant possibilities, see below, p. 317.

and (*C*) where the supply of building lots is exhausted, and the number of houses may be considered as constant.[1]

Case *A* is not attended with much difficulty. If the lot is situated in any outlying section, or in a decaying portion of a town where the demand is slack, the tax, even if advanced by the tenant, will be shifted to the landlord. The occupier can afford to choose, and will not voluntarily assume the burden of any one else. Being in the stronger position, he will not consent to pay the higher rent due to the imposition of the tax. This will hold good, however, only so long as the decay is continuous. As soon as the decay is arrested, we have the conditions of case *B* to be discussed in a moment.

Case *C* likewise presents little difficulty. Let us assume the existence of a walled town where every plot is occupied, or a section of the city which, through some combination of circumstances, is the only one fitted for a certain kind of business, and where all the land is covered with buildings. In such a case, the owner has a virtual monopoly, and will exact the highest rent that the tenant can pay. If a tax is, then, imposed on the tenant, it will be shifted to the owner, on the general theory of the taxation of monopoly profits; for, according to the hypothesis, the owner has already exacted the

[1] A somewhat similar classification is given by Dr. N. G. Pierson, at one time Prime Minister of Holland, in his *Leerboek der Staathuishoudkunde* (2d ed., 1896), pp. 156, 157 and 174–185; English translation, *Principles of Economics*, vol. i, 1902, pp. 140–141 and 151–167. Mr. Pierson distinguishes four cases: first, where there is an abundance of building lots, as in the country, and where the ground rent accordingly amounts to little or nothing; second, where the locality is decaying, and rents fall below the ordinary return on the capital invested in the house, and where the ground rent is also zero; third, where there is a rentless margin on the outskirts of the city with an interior area within which ground rents form a considerable portion — larger as we approach the centre — of the total house rent; fourth, where all the building lots are occupied, and where the supply of houses may be considered constant.

This classification, it will be seen, has many points in common with the distinctions in the text. Mr. Pierson thinks that when a tax is imposed on houses, the result will be that in the first case the ordinary law applicable to manufactured commodities will obtain and rents will rise; and that in the second and fourth cases, no influence on house rents will be perceptible. This solution of the third case will be considered immediately below.

uttermost farthing from the tenant. Could the tenant pay an increased rent — that is, the old rent plus the new tax — the landlord would have exacted this before the imposition of the tax. In the same way, a remission of an existing tax on the occupier would enure to the owner, through an increase of the rent charged to the occupier. Thus, in the case of a monopoly site, as well as in the reverse case of a site which goes begging for a tenant, a tax on house rent assessed on the occupier will be shifted to the owner.

The same would be true even if we do not invoke the theory of monopoly, and regard the situation simply as one where it is impossible to build any more houses, with an active competition among the existing house owners. For if the supply of a commodity cannot be increased, it is well settled that a tax imposed on it must be borne by the owner. As has been well said: "The supply of houses being perfectly inelastic, the owners have no choice but to throw these their wares upon the market without a reserve price; they must accept that price which just carries off the supply. Since the imposition of the duty does not increase the demand of the occupants, the payment per house which they can be got to make will not be increased." [1]

This case *C*, however, is only of theoretic interest.[2] Practically, it never exists. The mediæval walled towns which were increasing in population always reserved some vacant building space within the walls. As soon as this was exhausted, the walls were enlarged or the surplus population was swept beyond the walls. In modern times, again, there is not only no such thing as the impossibility of building new

[1] Edgeworth in *Memoranda*, p. 129. This is worked out more fully, with the aid of diagrams in *Economic Journal*, vii, pp. 49–50.

[2] Einaudi heaps Ossa upon Pelion by adding to this purely theoretical case the practically impossible variation of the tax on house rent being so high as to swallow up the entire net rent. *Op. cit.*, p. 161. On this hypothesis, some landlords, he thinks, will leave their houses vacant, thus leading to an increase in the rents of the remaining houses, so that the occupier would also suffer. "The amount of the tax so added to the rent would depend on the proportion of rented to unrented houses."

houses,[1] but there is also no such thing as a strict monopoly of building sites. The ground rent of even the dearest plot in a crowded city exceeds the ground rents of other plots only by the value of its relative superiority. Monopoly implies absolute control of supply. Where building lots shade into each other by imperceptible gradations, with an abundant supply of the lower-grade lots, we cannot speak of an absolute control of the total supply, but only of a control of a part of the supply. This is not monopoly, but only the ownership of a better grade, possession of which gives a higher price, but not a monopoly price.

Let us therefore leave these purely hypothetical examples and take up the really important practical problem, namely, case *B*, which is the ordinary case in normal communities. It is the case of a district growing in population and prosperity, where there is an ever-increasing demand for building lots, but where the increase of ground rent is limited by the possibility of utilizing unbuilt land in less favored sections. Rents in the crowded slums, or in a favored business section, will continually rise; but at any given moment the rise is limited to the differential advantages which a particular neighborhood possesses over other possible sites. With the increase of population, there is a continual increase of house accommodation in the wider periphery. The possibility of getting an equally good apartment a little further off will keep the rent of the better situated apartment down to the level of the other, plus an addition due to the advantages of the better situation. Rents in the slums are, indeed, higher than rents in the suburbs; but the former exceed the latter chiefly because of the saving in car-fare, and because of the assumed social benefits of life in a crowded city. Any effort to put rents above this margin of advantage would inevitably fail.

[1] Pierson, *op. cit.*, p. 141, thinks that an example is afforded by towns encircled by high mountains or deep waters. But even deep waters may be bridged, and as to high mountains, all that is needed to make a town run up a mountain slope is the increasing demand for houses, as is evident to any one who contemplates the recent growth of some of the Swiss mountain resorts.

It is here that opinions diverge as to the incidence of a tax on house rent. Some writers think that a large part of the tax will be borne by the landowner; others believe that a smaller part will be so borne. Our opinion is that the portion ordinarily borne by the landowner is so insignificant that it may well be disregarded.

Among those who believe that a large part of the tax will fall on the landowner, perhaps the most prominent is Dr. Pierson.[1] His solution is as follows: At the outskirts or the margin of building, where the demand for new houses increases with the growth of population, the imposition of a tax will cause the rents to rise by the amount of increase in the cost of production of houses, *i.e.* by the amount of the tax. This influence of the augmented rent in the suburbs will be transmitted to houses in the centre of the town, but the increase in the house rents in the more favorably located areas cannot exceed the increase in the rents at the outskirts. Since the site values or ground rents are higher in this central area, while similar houses cost the same all over the city, it follows, in his opinion, that inasmuch as the rents in the central area increase at most only by the same amount as those in the suburbs, the percentage of increase in the central area will be smaller, so that the landlord will bear a portion of the tax — a portion which will grow larger in proportion as the ground rent exceeds the house rent.[2]

[1] Blunden, *Memoranda*, p. 199, is mistaken in classing Pierson with me. He seems to have depended on some quotations made by Professor Edgeworth. — Among the few Englishmen who hold the same opinion is Sir Robert Giffen: "The idea of a separate rating of ground value arises from a misunderstanding of the real incidence of rates. As that burden falls *ab initio* on the ground landlord, diminishing the sum of capital or income he is able to obtain for his property, there is really no separate ground value to be assessed." — *Memoranda*, p. 97.

[2] This illustration is as follows: Of houses, one in a fashionable neighborhood fetches £200 rent, another in the suburbs where there is no ground rent fetches £60. The difference is £140. Now a tax of twenty-five per cent is imposed. Then £250 will be paid for the first house, and £75 for the second. But since the difference between the rents is now £175, "it is obvious that an anomaly has arisen, which must in some way be got rid of." For the real difference between them is by hypothesis only £140. Since there cannot be any rise in the rent of

This reasoning is ingenious, but overlooks the fact that the tax is not of fixed amount, but a percentage tax calculated according to the total rentals of the premises which constitute entirely different magnitudes. Such a tax will accordingly increase the rental of the better situated houses by more than the increase of the rental in the poorly situated houses. Since the tax, although at the same rate, will amount to a larger sum in the one case than in the other, it is similar to a percentage or proportional tax on different quantities of produce raised on lands of various grades, which as John Stuart Mill pointed out will increase the price of the produce and thus fall on the consumer.[1] There is hence no justification for the claim that as we reach the central areas of the town more and more of the tax will be borne by the landowner.[2]

the cheaper, there must be a fall in the rent of the dearer house, which will therefore be only £215 (£75 + 140). But this means that the rent of the dearer house, exclusive of tax, is £172 (£172 + 25% = £215), and since the rent of the house proper is by supposition £60, this leaves as ground rent only £112 as against the original £140, a diminution of £28, or exactly 25%. "From this it follows that the tax, so far as it is based on that portion of the rent which consists of ground rent, is borne by the owner of the house." — *Principles of Economics*, vol. i, p. 162. In fact, Pierson goes still further, and after some more elaborate calculations concludes that "a tax based upon rents and levied from the occupier of houses, must react upon ground rents to an extent *at least* as great as has been shown by our calculations, but it may react upon them to a still greater extent." *Ibid.*, p. 164. A similar arithmetical argument is employed to show that the same result would be true of a tax assessed on the selling value of the house, and imposed on the owner. This is the case mentioned above, pp. 288 *et seq.*

[1] *Cf.* the passage of Mill quoted above, p. 261, note 1. The ultimate results adverted to on that page are not pertinent in this particular connection, but will be mentioned below. Mill is here quoted simply to show that as Professor Edgeworth well remarks in *Memoranda*, p. 130, "there is no 'anomaly' [as Pierson thinks] in the supposition that the difference between the prices paid for these two quantities of produce should be increased by a tax."

[2] Professor Edgeworth puts the point with his customary lucidity: "Mr. Pierson's assumption [that the difference between the rents of the two houses may be expected to be the same after and before the imposition of the tax] would be appropriate if two similar houses dissimilarly situated could be regarded as two units of the same commodity, analogous to two quarters of barley grown on a highly rented site and at the margin of cultivation respectively. But I submit that the two houses ought rather to be regarded as *different quantities of commodity* analogous to the quantities of barley produced by the outlay of the same

But if the landowner does not bear the entire burden, nor even the greater part of the tax on house rentals, does he bear a considerable, or even an appreciable, part? An affirmative answer is given by a large number of writers.[1] This conclusion rests, however, on the general presumption that an increase in the price of a commodity due to a tax usually leads to a diminution in sales, with a possible ensuing loss to the producer. In other words, the increase of house rentals caused by the tax will lower the demand for building sites, and lead to a general reduction of ground rents throughout the community.

It is here submitted, however, that this argument fails to take notice of those important countervailing influences, which differentiate house accommodation from the general mass of consumable commodities or enjoyments. These are, first, the relation of the house owner to the landlord; secondly, the peculiar character of the demand for houses; and thirdly, the existence of economic friction. Let us consider these in turn.

In the first place, it must be remembered that when a man rents a house and agrees to pay taxes in addition to the rent, he does not make a formal distinction between the tax on building rent and the tax on ground rent. He is simply conscious of the fact that a house in a better neighborhood costs more than an equally good house in a poorer neigh-

capital at the margin and on a highly rented site."—*Memoranda*, p. 130, note. Professor Edgeworth's own solution of the problem is one of the subtle over-refinements of which he is so fond. He thinks that this is one of the instances of what he calls the case of correlated commodities, resulting in the paradox that a tax on one of two correlated commodities may increase the producers' surplus. *Cf. Economic Journal*, vii, p. 55. Hence "a tax on house rent might so disturb the balance of demand for urban and suburban accommodation respectively, as to cause a positive benefit to the owners." — *Ibid.*, p. 62. In another place, however, Professor Edgeworth concedes that "this *curiosum* in the theory of value seems only to be of importance as it tends to confirm the conclusion that the occupier will bear a considerable portion of the tax." — *Memoranda*, p. 130.

[1] As, *e.g.*, by many of the "experts" who gave their written testimony in the *Memoranda*, such as Professors Marshall, Edgeworth, Bastable, Gonner, Cannan and Price.

borhood, and that the local rates which he is called upon to pay are by so much the larger. If an additional tax is imposed on the rental, it is indeed conceivable that the tenant will content himself with meaner apartments in the same neighborhood, or will seek equally good rooms in a less desirable locality. In such a case, the decreased demand for the original house might induce the house owner to be satisfied with a lower rent, and he in turn would endeavor to shift the loss to the owner of the land. But is it true, as Adam Smith says, that "the more the inhabitant was obliged to pay for the tax, the less he would incline to pay for the ground"?[1] Is it not rather the case that, as we have pointed out above,[2] a tax on the owner of the building can be shifted to the owner of the land only in the exceptional and even purely hypothetical case of the tax being so high as to make the house owner willing to abandon the house? Moreover, the argument that the tax will be shifted to the landowner overlooks the important consideration that houses are not in all respects comparable to ordinary commodities. If a tax is imposed, for instance, on candles, the rise in price may lead to a fall in the consumption of candles in general, and to the use of a substitute. But if a tax is imposed on house rents, while the rise of rents may bring about a decrease in the demand for some houses, it cannot mean that the demand for houses in general has receded. For given a progressive city, or a population which is not diminishing, the total demand for house accommodation will not be lessened. If the tenant, as suggested above, seeks poorer rooms because of the tax, the demand for the poorer rooms will increase, and this will mean more houses of this kind, and hence an increase in the ground rents of such houses. In other words, we should have a readjustment of ground rents throughout the city, with an increase in some sections and a decrease in others. The net result will in all probability not be an appreciable rise of ground rents in general.[3] Hence, even

[1] *Wealth of Nations*, book v, chap. ii. [2] *Supra*, p. 290.

[3] The truth of this statement is attested by Professor Edgeworth in the follow-

on the assumption that the tax will bring about a change in the demand for particular houses, the burden will not fall (except in most unusual cases) on the landowner.

In the second place, the assumption that a tax on house rents will bring about a decided change in the demand for house accommodation must be received with some caution. When it is stated, for instance, that "the economist has not to construct a special law of taxation for the taxing of houses, any more than the physicist has to construct a special law of gravitation for the tumbling of houses,"[1] it is forgotten that a house, if its foundations are rotten, will fall to the ground more quickly than a balloon or a feather, and that what interests us here is precisely the ascertainment of the force and the velocity with which the law of gravitation acts.

Most writers who have spoken of houses have put them in the category of ordinary commodities of complete elasticity, where a change in price immediately brings about a proportional change in demand. But this hypothesis, upon which the validity of the reasoning in the preceding paragraph depends, is of questionable accuracy. In a previous chapter it was pointed out that in the case of absolute necessaries, as well as in that of expensive luxuries, great alteration of price goes hand in hand with slight variation of demand.[2] House accommodation, now, is in part an absolute necessary, in part an expensive luxury. For many classes of the population, especially in the congested areas, it is essential for the tenants to be near their work. For one reason or another, they prefer

ing passage, which has reference to the differential rates discussed below on p. 318, but which is equally applicable to this discussion: "The imposition of a uniform rate . . . would in all probability not materially affect the sum total of ground rent. . . . The demand surface with which we have to deal may be . . . likened to a sort of air cushion of which some parts are originally more elevated than others; but when you press down some, others go up, and, accordingly, the total depression is not to be expressed by any simple formula." — *Economic Journal*, x, pp. 341–342. So Professor Marshall points out "that specially onerous rates in one district are a bounty to ground landlords in others." — *Principles of Economics*, 5th ed., p. 798.

[1] Edgeworth, in *Economic Journal*, x, p. 183.

[2] Above, p. 229.

to remain where they are. As in the case of all necessaries, the effect of a tax will be to cause them to forego other things rather than change their residence. Practically, it means that they will raise money to pay the increased rent by such expedients as taking in lodgers — that is, by foregoing some of the comforts that they have hitherto enjoyed. In New York city, for example, the sudden rise of rents in the tenement house districts in 1907–8 (which was indeed only in part due to the increase of taxation) led to a short and fruitless so-called rent-strike on the part of the tenants, who endeavored in vain to resist payment of the increase; but it did not lead to any exodus of the occupiers. It would in fact require a more than ordinary discrepancy between the rents and proffered accommodations in the congested areas as compared with those in the suburbs to bring about a shifting of the population. In other quarters of the city, on the other hand, comfortable houses may be put in the category of luxuries. It is a familiar fact that many people prefer to maintain their supposed station in life at almost any cost. In such cases a tax on house accommodation tends, as in the case of all taxes on luxuries, to make them forego other things which they deem less desirable.[1]

[1] The foregoing argument has been accepted and reënforced by Mr. G. H. Blunden in *Local Taxation and Finance*, 1895, p. 51, and *Memoranda*, p. 190. "In estimating the proportion of occupiers who would remove to inferior houses if the rates were substantially increased, we may safely eliminate the majority of those who are able to save any considerable portion of their income, the diminution of the rate or scale of future earnings being a smaller evil than the loss of comfort or convenience which would result from the alternative course. We may also exclude those whose means enable them to enjoy luxuries which they value less than the luxury of a good house; and who, having no luxuries to surrender, yet prefer to give up some other necessary or decency of life in order to retain the use of a house of the class to which they have become accustomed. The surrender of some portion of their house accommodation is, for many reasons, repugnant to the feeling of the great majority of householders, and needs only be resorted to under the strongest pressure and in a small proportion of cases. Apart from the loss of accommodations and amenities involved, the trouble and expense of removal are not to be overlooked. But a still more powerful deterrent exists in the feeling that removal to an inferior house is a proclamation of poverty to the world. Whatever we may think of the sentiment, there can be no doubt

In general, then, it may be affirmed that the demand for house accommodation is far less elastic than is commonly supposed. The less elastic the demand, however, the more insignificant obviously will be the proportion of the tax which the occupier will be able to shift to his landlord. A tax, then, which will bring about such a displacement as materially to affect the demand for house accommodation must be an extraordinarily high one. Under normal conditions it may

that it is widely prevalent, and would cause a retrenchment upon privately consumed necessaries, such as food and fuel, to be preferred in many cases where there are neither luxuries nor savings to surrender." In a private letter quoted in *Economic Journal*, x, p. 188, he adds: "It is due to my daily observation of the facts (and not to any preconceived theory) that I hold the opinion that there is in actual life a much greater rigidity in the demand than has very usually been assumed. . . . As a result of my experience, I have become convinced that the effects of high or rising rates in lowering the standard of house accommodation is ordinarily inappreciable."

Professor Edgeworth originally conceded the truth of the contention in the case of dwelling houses of the laboring classes (*Economic Journal*, vii, 1897, p. 52), although he failed to notice that it is almost equally true of houses considered as luxuries rather than as necessaries. In the same article, in fact (p. 64), he goes so far as to grant the possibility of the demand in general being "perfectly inelastic" for short periods, and even for long periods. Later on, however, in the *Economic Journal*, x (1900), p. (18), he ignores these earlier concessions and accepts Professor Marshall's statement (*Principles of Economics*, book iii, chap. iv, 5th ed., 1907, p. 107), that there seems to be an elastic demand for house room, on account both of the real conveniences and the social distinction which it affords.

In 1902, Professor Einaudi made an exhaustive investigation of this point in a special section of his general inquiry (*Studi sugli Effetti delle Imposte*, pp. 30–71). After declaring that my contention contains "a great part of truth" (*gran parte di vero*, p. 39), he concludes that the demand curve for house accommodation, especially in the case of dwellings, is rigid at first and particularly so in the lower grades, and that it becomes less rigid as the scale of living ascends (p. 52). While I do not quite share his opinion as to the conditions at the upper end of the scale, I regard his investigation as in the main confirmatory of my position, inasmuch as the great mass of house rents for dwelling purposes are to be found in the lower grades. Later on, in fact, Einaudi speaks of such a rigid demand as being quite frequent (*abbastanza frequente*, p. 164). The contention is also accepted by Row-Fogo, *An Essay on the Reform of Local Taxation in England*, pp. 146–147. *Cf.* the references to what he calls the "grotesque rent-fund theory" of Mr. Cannan on p. 142. So also Mr. L. Price says: "His [the tenant's] house accommodation is within narrow limits of increase or decrease of requirements a fixed item in his standard of comfort. — *Memoranda*, p. 180.

safely be affirmed that the relative rigidity of demand for house accommodation is apt to frustrate the action of the assumed law of shifting of the tax from tenant to landowner.

The third point referred to above[1] as calculated still further to impede the process of shifting to the landowner is the existence of economic friction. Just as we have objected to the older theory of the shifting of the land tax to the consumer, because of the untenable assumptions of perfect mobility of capital and territorial isolation, so the same objection may be made to the theory of the necessary shifting of the local rates from occupier to landlord, and largely because of similar untenable assumptions. As has been well said, economic rent is "the rent which an intelligent tenant who had an alternative investment for his capital and mobility, and acquainted with the market and his own industry, would offer to pay."[2] But the rent actually paid often differs from pure economic rent. John Stuart Mill has pointed out that in Ireland agricultural rents are often persistently above the economic rent, mainly because of the lack of opportunity and the lack of mobility on the part of the tenant. In the same way the tenants in the slums of large cities have practically little mobility. They must live in the neighborhood of their work, they shrink from the expense in moving from apartment to apartment, and their choice is limited in a hundred ways. Here, as in so many other cases, the tendency of the tax is to stay where it is first imposed.[3]

[1] *Supra*, p. 310.

[2] Sidney Webb, in *Select Committee on Town Holdings*, 1890, Evidence, qu. 51.

[3] As Sir T. H. Farrar says: "Whatever be the theory on these matters, a tax is very apt to stick where it first falls." — *Select Committee*, etc., Evidence, qu. 1246, and *Memoranda*, p. 66. *Cf.* Thorold Rogers: "It is by no means the case that a person who has a tax imposed upon him can always impose the whole of that tax upon his neighbor." — *Ibid.*, qu. 2721. The practical influence of friction is well brought out by Mr. L. L. Price in *Memoranda*, p. 181. It is to be deplored that Mr. Price should be so inexact in his nomenclature, as when he speaks (p. 179) of "shifting the incidence" of a tax. The same unfortunate phrase is used by several other writers, like Lord Farrar (p. 67) and even Sir E. W. Hamilton (p. 38). *Cf.* the warning in the Introduction, *supra*, p. 2.

Some of the qualifications of the old doctrine are well put by Cliffe-Leslie in

Summing up all these considerations, it appears that the tendency for a tax imposed on the occupier to be shifted even in part to the landowner is so considerably counteracted by opposing forces that we are safe in claiming that the portion which is actually shifted to the landowner is so insignificant as to warrant no serious consideration. A tax upon house rent, especially when assessed upon the occupier, is therefore borne to an overwhelming extent by the occupier; and only in more or less unusual cases is it shifted by him, even in part, to the owner of the house or land. The exceptional conditions are to be found in outlying or suburban districts, in decaying quarters, and in cases of extraordinarily high taxes. What in the older theory was considered the rule thus turns out rather to be the exception. In the long run the occupier tends to bear the tax, except in those quarters or under those conditions where the demand suffers a consider-

the following passage: "The doctrine by which eminent economists of our own day affect to determine the incidence of rates assumes . . . that capitalists not only know the past and present profits of all occupations and investments, but foreknow them at remote periods — to the end of a long building lease, for example. Yet it is clearly impossible for persons contemplating the building or buying of new houses to foretell, even for twenty years, the profits that a single investment will yield. The movements of business and population, the demand for houses and other buildings, the increase of wealth and money, and the general range of incomes and prices, the supply of new houses on the spot, the means of locomotion bringing other districts within reach, all defy calculation. . . . The truth is that the profits of house property, the rents that can be exacted from occupiers, and the incidence of rates, depend on no such fiction as the 'average rate of profit,' but on the demand for and the supply of houses, and these conditions vary from time to time, and from place to place. . . . The constant increase of population, the narrow limits of distance from their business within which it is convenient to most people to live, and the cost and trouble to existing occupiers of removal, give the owner, in most cases, the stronger position, and enable him to throw any increase in the rates on the occupier. . . . The occupier of the house pays all the rent that can be screwed out of him. A little more could be screwed out of him were there no rates, and to that extent the rates may be said to fall on the owner, the remainder being borne by the workmen."— "The Incidence of Imperial and Local Taxation on Working Classes," in *Essays in Political and Moral Philosophy*. London, 1879, pp. 207–209. In the 2d ed., under the title *Essays on Political Economy*, London, 1888, this passage may be found on pp. 399–401.

able check, or where we are confronted by an absence of competitive conditions.

The above discussion has dealt with the cases which occur in actual life. Some writers who love to turn economics into a playground for logical exercises discuss various hypothetical solutions which never happen, and which may therefore be relegated to a note.[1]

The discussion of the incidence of local rates in England has been much beclouded by two considerations, one of actual fact, the other of questionable theory. The fact is the existence of differential rates; the theory is the alleged distinction between "onerous" and "beneficial" rates.

Let us consider first the fact of differential rates. Local taxes in England, instead of being uniform throughout the

[1] Thus Professor Edgeworth discusses the possible results of a tax (1) where there is no competition at all between houses in different parts of the city (*Economic Journal*, vii, p. 62); (2) "where only one 'dose,' so to speak, of building capital can be applied to one parcel of land," *i.e.* where "only a single-storied dwelling of uniform pattern can be placed on each unit of the area available for building" (*Ibid.*, p. 64); (3) where the investments open as an alternative to an intending builder "are not indefinitely extensive in comparison with the housebuilding industry" (*Ibid.*, p. 68). In the first of these practically impossible cases the tax will obviously rest on the landowner; in the third, on the house owner.

Professor Einaudi, however, far surpasses Professor Edgeworth in his discussion of purely supposititious cases. He takes the letters from A to M (omitting J and K), each representing a certain condition of the case, and he then proceeds to vary each condition in turn. (*Studi sugli Effetti delle Imposte*, pp. 156 *et seq.*) Had he the courage of his convictions, there would thus be not less than eleven times eleven, or one hundred and twenty-one, separate variations. This was evidently a little too much, and some of the hypotheses were omitted presumably because the practical impossibility was too obvious. Among the impossible cases discussed may be mentioned, in addition to those found in Edgeworth, the following: 1. Where a tax is imposed only on dwellings which cannot be converted into houses used for other purposes (p. 166). 2. Where there is a complete monopoly on the part of the landlord (pp. 167 and 186), a situation of which Einaudi himself says that it is "an extreme case which scarcely ever happens" (*caso estremo che quasi mai si verifica*). 3. Where the houses are not substitutes for each other, and where the tax exceeds the net rent (p. 178). We shall not stop to deal with his solutions of these cases. As a training in mathematics or logic the discussions of Professors Edgeworth and Einaudi are, no doubt, exceedingly valuable; but as contributions to an economics which is to be of any use in this world, their value is not in all respects quite so apparent.

country, as is the inhabited house duty, vary from locality to locality. This system of local variation was the original one everywhere, but has in some countries given way to a uniform tax. For instance, in Belgium, since a long period, and in France since a quarter of a century, the tax on houses has become a percentage tax uniform throughout the country; whereas in England the tax is still apportioned, as in America, and varies from place to place. The whole of the preceding discussion has proceeded on the assumption that the rate of the tax is uniform on all the houses concerned. To the extent that the rates vary in different parts of the same town, it might seem that the excess in any particular case tends to fall ultimately on the owner, not on the occupier. If a prospective tenant, on whom taxes are levied in first instance, has the choice of two houses of equal desirability but in different parts of the town, the amount of the tax being in one case ten dollars more than in the other, he will obviously choose the latter house, or compel the owner of the former to forego ten dollars of the rent. In England the districts within which the rate of the tax is uniform are much smaller than in America. It frequently happens that different parts of the same city, or even opposite sides of the same street, pay different rates, because located in different parishes. In such cases it is fair to make a distinction between the constant and the variable or differential part of the rate, the latter representing the excess above the rate that is uniform in all the districts. Only the constant part of the rate would then fall on the occupier; the remainder being presumed to be borne by the building owner, and under favorable conditions being shifted by him to the landowner. This variable element of the building tax, however, will in general be very insignificant in amount, for the reason that, even in England, the normal differences in the rates in city districts which usually have similar expenses are apt to be exceedingly slight.[1] Moreover, the preceding argument

[1] The contention of Sargant, *Urban Rating*, 1890, p. 49, that the differential rate amounts to two-thirds or even three-quarters of the total tax, seems to in-

ignores the fact that if the prospective tenant is induced by the tax to refrain from renting the house in the highly taxed district, thus reducing the demand, he will rent a house in the undertaxed district, thereby increasing the demand. The total demand for houses may thus not be appreciably affected, and the landowners, as a class, may hence not suffer.[1] On the whole, then, it may be said that even in the case of a differential rate, the tax on house rentals will fall almost entirely on the occupier.[2]

volve an error. He terms "constant" rate only that part of the tax which is uniform throughout the kingdom. This is arbitrary. In speaking of a differential rate we must always compare two houses of equal desirability or in the same neighborhood; for it is manifestly impossible to say how much of the differential rate falls on the structure, and how much on the plot. We must not compare a house in London with a house in a country parish, because there is no competition between them. The rule holds good only within the narrow range of houses subject to the same competition. Sargant's views are repeated with emphasis in *Memoranda*, p. 213. As Edgeworth sarcastically remarks in *Economic Journal*, x, p. 343, note, "as to the extent of the reduction, Mr. Sargant's authority cannot be claimed." *Cf.* also, J. D. Chorlton, *The Rating of Land Values*, 1907, p. 21, who says: "More importance is attached to this qualification than it appears to me to deserve."

[1] *Cf.* Marshall, in *Memoranda*, p. 119: "It is true that an equalization of rates would raise the aggregate of site values if it removed rates from the best sites and increased rates on the inferior sites. But the equalization is at least as likely to transfer part of the burden of rates from the inferior sites to the better sites, and if it did that, it would lessen the aggregate of site rents." — Edgeworth, in the *Economic Journal*, x, pp. 342–343, in quoting the statements of several contributors to the *Memoranda* who think that the differential rates tend to be shifted to the landowners, judiciously observes that these writers express themselves "with less qualification than might perhaps be recommended."

[2] Fawcett's discussion of this question is unsatisfactory. He makes a distinction between buildings in general and those possessing exceptional advantages of situation. In the former case, rates, he says, are a charge on the occupier; in the latter, on the ground owner. "For if rates were remitted, the saving resulting would simply represent so much added to the ground rent, since rent is fixed by the demand, and the demand would not be altered if rates were remitted." Fawcett's argument can be turned against him. It may equally well be said that given a certain demand before rates were imposed, the levy of new rates would not change the rent because it would not change the demand. Hence the rates would fall on the occupier who pays them, and not on the ground owner, whose rent is unchanged. In fact, Fawcett's whole distinction between these classes of houses is untenable. Every house possesses "certain advantages or disadvan-

We come then to the second consideration mentioned on page 317, the alleged distinction between onerous and beneficial rates.

It so happens that in England, instead of there being a single tax on house rents, as is commonly the case elsewhere, the tax is divided into a multiplicity of charges, such as the poor-rate, the sewers-rate, the water-rate, the lighting and watching rate, the sanitary rate, etc. This has induced some writers to maintain that in certain cases the taxes are nothing but charges levied in return for the advantages accruing to the tax payer, and that such charges, which are levied in proportion to special benefit received, ought to be called beneficial rates, as opposed to the taxes which, because of the impracticability of ascertaining any separably measurable benefit to the individual, should be called onerous. The onerous rates are burdensome; the beneficial rates are not burdensome because the burden is compensated by the advantage. The onerous rates are assessed in accordance with the principle of ability to pay; the beneficial rates in accordance with the principle of benefit.[1]

As a matter of fact, however, there are virtually no such beneficial rates. As has been pointed out in another place,[2] the utmost that can be claimed for some of the so-called beneficial rates is that the benefit is supposed to accrue to all the rate payers living in a certain area. Even in such cases, however, the law specifically forbids the application of the principle of benefit to the individual rate payer.[3] The whole

tages of situation." The advantages merge into each other by imperceptible gradations. *Cf.* his *Manual of Political Economy*, 6th ed., 1883, p. 618. On the other hand, the commonly accepted doctrine of Ricardo and Mill fails to make either of the distinctions that have been pointed out in the text, for it states that the ground tax falls on the owner, and the house tax on the occupier, — each of which statements is partially incorrect, or, at all events, inexact.

[1] This nomenclature seems to be due to Sir G. H. Murray in "Notes on the Growth and Incidence of Local Taxation," *Economic Journal*, iii (1893), p. 701, and has been widely adopted, especially by the Royal Commission on Local Taxation.

[2] Seligman, *Essays in Taxation*, 9th ed., 1921, pp. 439–443.

[3] Take, *e.g.*, the most extreme case — that of the sewers-rate (which, be it

distinction is an unhappy one, peculiar to the English writers and due to the absence of a proper analysis of taxes as compared with fees and assessments.[1]

Even if there were any beneficial rates, however, it would be entirely impracticable to separate them from the so-called onerous rates. This is recognized by the best authorities. Sir Edward Hamilton, for instance, in his introductory memorandum to the Royal Commission on Taxation, tells us distinctly that as "I have no means of properly distinguishing 'beneficial' from 'onerous' rates, I have no choice but to treat all rates together."[2] And Professor Edgeworth, after a careful review of the problem, concludes that "altogether the distinctions between onerous and beneficial taxation are not so fundamental as to be the grounds of essentially different regulations."[3]

Above all, however, the alleged distinction between these two classes of rates does not in the least help the case of those who claim that an appreciable part of the local rates is shifted to the landowner. On the contrary, it is beyond all question

remarked in passing, has nothing in common with city sewers in the modern sense, but which is more properly called the "land drainage" rate). Here it is clearly established that "it is not lawful to rate lands differentially according to benefit." Knight *v.* Langport Drainage Board [1898], Q. B. 588; quoted in *Rates and Taxes. A Practical Guide.* By E. M. Konstam, 1906, p. 79. In the same way a water-rate may be levied on a house even if the owner or occupier does not desire any water, or uses none. Public Health Act, 1875, s. 62. *Op. cit.*, p. 70. All this seems to be overlooked by Cannan, *History of Local Taxation*, p. 138, when he affirms: "It may be said that the [existing] system is more in accordance with . . . the principle . . . of taxation according to benefit, than with . . . that of taxation according to ability."

[1] See the chapter on the "Classification of Public Revenues" in Seligman, *Essays in Taxation.* Professor Marshall accepts the distinction between onerous and non-onerous rates, but prefers the term "remunerative" to "beneficial." *Memoranda*, p. 113; *Principles of Economics*, 5th ed., 1907, p. 718. Most unfortunately, however, he selects as his example of a tax where "the owners of the property to be benefited may fitly be assessed on the 'joint-stock principle' according to which calls are made from shareholders in proportion to the stake in the common venture" the case of "an arterial system of local drainage." As has been pointed out in the preceding note, this is precisely what is *not* done. If it were done, it would not be a local rate at all (which is levied annually), but a "betterment tax" or special assessment.

[2] *Memoranda*, p. 37.

[3] *Economic Journal*, x, pp. 182–183.

that if a rate were really "beneficial," the imposition of the tax would not be felt as a burden, would hence not diminish the demand for house accommodation, and could therefore not be shifted to the owner.[1] So that, if there were any such portion of the aggregate tax on house rents as is erroneously imagined by the English writers, it would only strengthen the case of those who assert that the amount of the local rates shifted to the landowner is ordinarily inappreciable.

Finally, it must not be overlooked that, strictly speaking, the term incidence should not be applied at all to the possible but practically negligible small residuum of burden resting on the landowner. This ought rather to be classified as one of the wider effects of taxation. Even if the tax should induce tenants to satisfy themselves with poorer houses, thus reducing the demand for better houses, and consequently diminishing the revenue to the government, the tax imposed on the occupier will nevertheless fall on him. A small aggregate tax on smaller rent is just as bad as a high aggregate tax on high rent. Whatever may happen to the landlord, the occupier cannot escape payment of his tax; and it cannot well be said that any portion of the tax is shifted to the owner or that the incidence of the tax rests on him.[2] The mere fact that certain undesirable wider effects of the tax are traceable to the

[1] This is conceded by Professor Edgeworth, who says: "So far as imposts are beneficial, the demand of the occupier is increased to the full extent of the impost, and accordingly there is no relaxation in the demand for sites." *Economic Journal*, x, p. 342.

[2] The above contention is accepted by Row-Fogo, *op. cit.*, pp. 145–146: "If rates had never existed, people might be living in larger houses, and more land might be built on. In this alone lies any importance which may attach to the question: Do tenants take rates into account? . . . A discussion of such 'effects' of a house duty on landowners is not really pertinent to the present inquiry, for we only wish to know whether landlords pay rates." — Professor Edgeworth also virtually concedes this, when he says: "What the Exchequer loses through the diminished use of houses is not, in general, equal to what the ground landlords lose through the diminution of demand for sites. Nor would the equality be of any fiscal significance, since what is lost by the ground landlords is not gained by the Exchequer. Indeed, the question has been raised whether an effect of this sort — detrimental to a certain class, without any corresponding benefit to the Exchequer — can properly be described as the *incidence* of a tax." — *Memoranda*,

landlord's interest does not, properly speaking, impugn the accuracy of the statement that the tax received by the government, whether it be a high tax on high rentals or a low tax on low rentals, is entirely paid and borne by the occupier. Even regarding the problem, however, as one of the wider effects of taxation, we have seen that there is little reason to claim the existence of any appreciable burden on the landlord. The contrary doctrine which is still found in some of the leading writers is due in large measure to their inattention to the highly important practical consequences of qualifications which they themselves make, but whose significance they underrate.[1]

pp. 131–132. We have seen above the reasons for thinking that Professor Edgeworth is mistaken in the amount of detriment which he ascribes to the landlord.

[1] Professor Edgeworth's concessions have been mentioned above. Some of them are again summed up in *Memoranda*, p. 199. Professor Marshall also makes the following concessions: "Those rates which are truly onerous are less in amount and vary less from place to place than is commonly supposed" (*Memoranda*, p. 118); "When rates are compounded, friction sometimes sets on the side of the tenant (*Ibid.*, p. 120); the occupier bears more of the burden [of a new tax] than he would if part of the rates were collected from the owners" (*Ibid.*). When Professor Marshall states his broad generalizations, he does not, in my opinion, make sufficient allowance for the practical effect of these concessions. — Perhaps the most noteworthy of the recent writers to discuss the tax on the occupier is Mr. G. H. Blunden, in an article on "The Incidence of Urban Rates," published in the *Economic Review*, vol. ii, October, 1891. Mr. Blunden's conclusions agree in the main with those expressed in the text, with one exception. He seeks to make a distinction between dwelling-houses and shops or business premises, thinking that rates on shops in the best situation fall on the ground landlord because he possesses a monopoly. But in the first place Mr. Blunden really makes no such distinction, because he tells us (p. 496) that rates on ordinary dwelling-houses in congested areas may also fall on the ground owner, while in less desirable localities rates, whether on dwelling-houses or on shops, do not fall on the ground owner. Mr. Blunden's distinction is therefore really one between monopoly and competitive sites, not between shops and dwellings. But even this distinction of Mr. Blunden is untenable, for the advantages of sites merge into each other by imperceptible gradations. The relative differences in eligibility between an alleged monopoly site and a less desirable site nominally subject to competition are not altered in the least by the imposition or the remission of a tax which affects both sites proportionately. In his book on *Local Taxation and Finance*, London, 1895, Mr. Blunden seems to modify his distinction between dwelling-houses and shops. See pp. 55, 56. *Cf.* also his later exposition in *Memoranda*, pp. 189–190 and 199.

In conclusion, it need scarcely be pointed out that the problem is not completely solved by the statement that the incidence of the tax is on the occupier. For this may be only the beginning of a process, as a result of which the broader effects of taxation are visible. This problem, however, has been discussed above in connection with a tax on the selling value of real estate.[1] The conclusions there reached are also applicable here.

To sum up this whole discussion, it may be said that when the local real estate or house tax is levied according to the gross rent of the house and is assessed in first instance on the occupier, the house owner in prosperous and progressive communities will not suffer, the burden will rest only to an insignificant extent on the landowner, and the tax will fall almost entirely on the occupier of the premises. In decaying and unprosperous districts, indeed, these conclusions may be modified; but in all cases more of the tax will tend to be borne by the tenant when the tax is originally imposed on him than when the tax is assessed on the owner.[2]

[1] *Supra*, pp. 296–298.

[2] It is no wonder, then, that in England the movement for a tax on ground values, assessed on the owner, should now be making such rapid headway. For the English system, with its exemption of the landowner from special assessments for local improvements, and with its casting so large a share of the whole burden on the occupier, is assuredly open to criticism. In Scotland and Ireland the rates are generally divided between occupier and owner. The same plan was at one time also proposed in England, but the solution of the problem there will probably be found in another direction.

For an application of the above general theories to American conditions see the *Final Report of the Committee on Taxation of the City of New York*, 1916 (398 pp.) and especially the supplementary volume *Some Probable Effects of the Exemption of Improvements from Taxation in the City of New York. A Report prepared for the Committee on Taxation of the City of New York.* By Robert Murray Haig. N. Y., 1915, esp. pp. 124 *et seq.* *Cf.* also the same author's *The Exemption of Improvements from Taxation in Canada and the United States. A Report prepared for the Committee on Taxation of the City of New York.* 1915 (291 pp.).

CHAPTER IV

Incidence of Taxes on Personal Property, on Capital and Interest

What is called personal property in English-speaking countries includes not only capital in the economic sense, but consumable commodities not used in production, like books and pictures, and wealth of other kinds, like money. Taxes may be imposed either on property itself or on the revenue derived from property Since all taxes are nominally paid out of revenue, it is thus immaterial, so far as the question of incidence is concerned, whether we speak of taxes on capital or of those on interest and profits. It has been laid down as a general proposition by a recent writer that "the taxation of property is the taxation of the property owner."[1] The matter, however, is by no means so simple as is assumed.

So far as a tax is laid on personal property which is not capital it cannot be shifted. For instance, if a tax is imposed on the permanent owner of luxuries, like pictures or jewels, he, and he alone, bears the burden. Of this nature are what are known in England as the assessed taxes and in the continental countries as sumptuary taxes. Whatever is held simply for enjoyment and not for sale, provided it is not used for productive or lucrative purposes, is not capital. A tax on such property cannot be shifted, because the property is not sold, and because it produces nothing which can be sold. Here, indeed, the taxation of property is the taxation of the property owner. On the other hand, the incidence of a tax

[1] "The Single Tax." By Charles B. Spahr. In *Political Science Quarterly*, vi, p. 633. *Cf.* the same author's *An Essay on the Present Distribution of Wealth in the United States.* New York, n.d. (1896), p. 154, note.

on capital or on profits and interest is somewhat more complicated. We may conveniently discuss the subject under three heads:—

A. A uniform tax on all capital or interest.

B. An unequal tax on all capital, or a uniform tax on only some forms of capital or interest.

C. A tax on profits.

It is with this last division only that the English economists have hitherto concerned themselves.

A. A Uniform Tax on all Capital

Let us frankly state, at the outset, that this is only a hypothetical case. It is the theory of the American property tax; but it is not the practice, and it can never be the practice. Why not?

A tax on capital can be unequal in two ways. There may be inequality in the rate, or there may be inequality in the taxable capital. In other words, the tax may be assessed on all capital, but in different proportions; or it may be assessed on only some forms of capital. Now a universal tax on all capital is an impossibility in the modern world. It might be possible in a completely isolated community, where all the inhabitants employed their entire capital within the narrow limits of the community; but in actual life it does not exist. Not only does the tax differ from commonwealth to commonwealth, but the field within which capital is employed is as wide as the world; while the efficacy of any tax law is restricted to a particular state or locality. In other words, the international employment of capital renders a tax on all capital an impossibility. Only on the assumption that every state in the whole world taxed all forms of capital alike could we have such a universal tax. But this is most improbable.

Secondly, even granting that there was such a universal tax, it would still be unequal within the limits of any particular state; for, even if the state attempted to tax all forms of capital at the same rate, it could never succeed. Not only

would there always be some forms of capital within the state which, as all experience has shown, would completely evade taxation, but the same legal rate on various kinds of capital would inevitably be a different actual rate. This is evident when we consider the rate of interest. The rate of interest varies with different kinds of capital, according to the security of the investment, the length of the loan, the state of the money market and a hundred other factors. In New York state, for instance, during a single year the rate of interest has varied from two and a half per cent on certain prime bonds to a few hundred per cent on loanable capital in Wall Street. A uniform rate of tax on capital would thus result in very divergent actual rates on the interest or earnings of various forms of capital. Hence, from whatever point of view we regard it, a uniform tax on all capital is an impossibility.[1]

Bearing in mind, then, that a uniform tax on capital is only an hypothesis, let us endeavor to ascertain its incidence. The question, of course, can affect only the capitalist and the borrower. As between them, it is plain that a uniform tax on all capital must fall on the lender, that is, on the capitalist. There would be no way for him to shift the burden. As it is not to be assumed that he would consume his capital unproductively, he would attempt to reimburse himself for the tax either by investing the capital in some business or by lending it to some one else. If he invested it in a business, the demand for loanable capital would decrease as much as the supply, for he would simply be doing what the borrower would otherwise have done. The rate of interest would thus not rise. If he invested it in fixed capital or land, the rate of interest would certainly not tend to rise; for any large investment in fixed capital would simply set free so much circulating capital, that is, the purchase price of the fixed capital. Under either supposition, therefore, the tax could not be shifted.

There is, however, one case in which the burden of the

[1] Pantaleoni, *Traslazione*, p. 245, has called attention to this fact. His whole discussion on this point is very noteworthy.

tax could be partially overcome. If the tax were so high as to diminish the return to capital below what Mill calls the practical minimum, further accumulations would be checked. An attempt would be made by the employers of capital to improve production to such an extent that the enhanced profits would still give them the same net returns as before. This phenomenon is what we have called the transformation of taxation.[1] It is sometimes the result of taxes on capital, which act as a stimulus to improved methods of production. To the extent that this is not true, indeed, further accumulations of capital would be discouraged. Even in such a case, however, it does not follow that the tax would be shifted to the borrower. The loss would be felt by the community at large in the shape of a decline in general prosperity. It is impossible to state in advance how much of the burden would be borne by any particular class of the community.[2]

B. An Unequal Tax on Capital

Let us now leave the realm of hypothesis and assumption, and come to the facts of every-day life. The actual tax on capital is, as we have seen, everywhere an unequal tax, however equal it may be nominally. The important question thus is: What is the incidence of an unequal tax on capital? Let us discuss the incidence as between (1) the original owner and the new purchaser; (2) the present owner and the borrower; or (3) the producer and the consumer.

1. *The Incidence of a Capital Tax as between Original Owner and New Purchaser*

This whole subject is governed by the law of the capitalization of incidence, which has already been discussed.[3] We need thus only repeat our former conclusion. When a new

[1] *Supra*, p. 5.

[2] John Stuart Mill, *Political Economy*, book v, chap. 3, § 3, comes to practically this conclusion in discussing the tax on profits. Properly speaking, the argument is applicable to the tax on capital or interest, as stated in the text.

[3] *Supra*, pp. 221–226.

or suddenly increased partial tax is imposed on certain kinds of capital, the tax, if it cannot be shifted to the consumer of the article, or if it does not lead to a gradual cessation of the production of the commodity, will be discounted in a depreciation of the capital value of the article by a sum equal to the capitalized value of the annual tax, and will therefore fall on the original owner of the commodity before the tax was imposed or increased, and not on the new purchaser. In other words, when two classes of capital are taxed at unequal rates, the excess of the tax above the average rate tends to be borne by the original holder, because the new purchaser pays so much less for capital on account of the tax. Otherwise he will prefer to invest his money in something else which will bring him the usual interest. It is only when the tax is again increased that the present owner is compelled to bear the new burden. The limitations of the doctrine must, however, not be forgotten;[1] for it is just because of failure to notice these limitations that some writers have fallen into the error of assuming that a tax on capital is always a tax on the capitalist. If a tax could not be shifted, or if it could not destroy the producer, who has bought the business, then indeed the excess of an unequal tax, or the exemption from a tax, would be capitalized or amortized into a change in the capital value of the capital taxed. But, as we shall soon see, it is an error to assume that the tax can never be shifted, or, on the other hand, that it can never injure the purchaser who continues to produce.

2. *The Incidence of a Capital Tax as between Debtor and Creditor or Borrower and Lender*

To just the same extent that it is difficult for a capitalist to shift a tax which is imposed on all capital, it is easy for him to shift to the borrower a tax which is imposed on only

[1] For a fuller discussion of this doctrine as applied to an important class of capital, see the essay on "Taxation of Corporations," in Seligman, *Essays in Taxation*, 9th ed. (1921), pp. 308–311.

some forms of capital. That is to say, in the case of an unequal tax on capital, it is generally the debtor and not the creditor who suffers. How can this be proved?

The rate of interest on capital can rise only through an increase in the demand for capital or through a decrease in the supply of capital. Some writers maintain that demand will increase. It is claimed that if a tax be imposed on the capitalist lender, and if, accordingly, the borrower be now allowed to deduct from his taxable property the amount of the loan, the borrower will be able to pay a higher rate of interest. Since he is no longer taxed on the debt, he will be able to lay aside more. This will increase his effective demand for additional capital. Because of this increased competition for capital, the rate of interest will rise, so as to leave the creditor uninjured, notwithstanding the imposition of the tax.[1]

This argument, however, as Rau has shown, is inadequate.[2] In the first place, it is not necessarily true that the borrower is allowed to deduct his debts from his taxable property; in the American commonwealths it is frequently the rule that debts cannot be deducted from personal property. Secondly, even if debts are deducted, it does not follow that the competition for capital will increase; for only a part of the debts will have been contracted for industrial purposes, while a portion will have been the result of losses or accidents. An amelioration in the condition of the debtor may therefore just as possibly result in a payment of old debts as in a contraction of new debts. Thirdly, if an increase of the debtor's profits (due, for instance, to the exemption of the debt from taxation) enhances the demand for capital, every decrease in the rate of interest would do the same; and this increased demand would counterbalance the decrease in the rate, so

[1] This is the argument of Kröncke, *Grundsätze einer gerechten Besteuerung*, 1819, pp. 130–138. *Cf.* the same author's *Ausführliche Einleitung zur Regulirung der Steuern*, 1810, p. 35.

[2] Rau, *Finanzwissenschaft*, §§ 381, 382, vol. ii, pp. 156, 157 (5th edition). *Cf.* also Pantaleoni, *Traslazione dei Tributi*, pp. 253–255.

that interest could never permanently fall. But this is manifestly untrue. Hence the argument that a tax on capital will increase demand is untenable.

On the other hand, the argument that the supply will decrease is more successful; in fact, this is the real basis of the whole theory of the shifting of the capital tax, whether it be a tax on mortgages or on any other form of loanable capital. The argument was first advanced by Turgot,[1] and rests really on the fundamental assumption of the mobility of capital. Capital, it is said, shows its mobility in two ways: if employed unremuneratively, it will be removed or transferred either to some other industry or occupation within the country, which affords higher gains because untaxed, or it will be removed to another country where the same industry or occupation is not taxed. In other words, there is both an internal and an international migration of capital continually going on — a migration from industry to industry, and one from country to country. Capital, the argument continues, always seeks to secure the highest returns. Impose a tax on the capitalist lender, and he will insist on an increase of the rate of interest tantamount to the tax, or else will transfer his capital to some untaxed occupation within or without the country.

But while it is abstractly true that a special tax on capital will be shifted to the borrower, it often happens in practice that the assumed absolute mobility of capital is countervailed by other forces that may be summed up under the name of economic friction. These opposing influences may be classified as follows: (1) ignorance of the capitalist; (2) difficulty of removing the capital; (3) risk connected with the migration to other countries; (4) social or other considerations which make for permanence of investment; (5) legal obstacles.

Ignorance of the capitalist, it may be confessed, is not of very material importance. In a highly developed industrial

[1] Turgot, "Observations sur un Mémoire de M. de Saint-Péravy en faveur de l'Impôt Indirect," in his *Œuvres* (Daire's ed.), i, p. 423. See above, p. 139.

organism, under the modern régime of interchange of thought and communication of news, the fact of extraordinary profits in any particular occupation cannot be long concealed. Especially the distinction which concerns us here — that between taxed and untaxed capital — must be obvious to the average investor. With the growth of modern society the ignorance of the investor is a factor of continually decreasing moment.[1]

More important is the difficulty of removing capital to more lucrative employments. Of course, in the case of loanable capital, as in the stock exchanges of to-day, this difficulty is reduced to a minimum. But in proportion as the capital assumes more and more of a fixed character, its mobility grows gradually less. To transfer investments from one stock to another is a very different matter from abandoning all the plant and machinery in one business in order to enter upon another occupation.

The risk connected with investments in foreign countries is likewise not so great as it formerly was. It is indeed true that creditors, as a rule, like to be near their debtors. American capitalists prefer the less remunerative mortgages in the East to the high interest-paying investments in the Western states. Moreover, it frequently happens that home investors or domestic corporations are treated more leniently, both as regards taxation and in other respects, than foreigners. It is the survival of the old law of aliens. This check on interstate or international transfer of capital is, however, gradually losing its potency.

Social considerations of various kinds often interpose a more serious obstacle. It is not always strictly true, as Adam Smith said, that "the proprietor of stock is properly a citizen of the world, and not attached to any particular country." Feelings of patriotism, of local pride, of desire of proximity to friends, of long custom and old usage, sometimes play a considerable rôle. Although they may be called non-economic

[1] For a proof that it is of some importance, *cf.* Cliffe-Leslie, "On the Philosophical Method of Political Economy," in his *Essays in Political and Moral Philosophy*, pp. 235–237.

motives, they are none the less to be reckoned with by the economist.

Finally, the law may prevent the free migration of capital. Under the American state bank laws, for instance, there was very generally a provision that banks could invest their deposits only in certain specified state securities or mortgages. The large demand for state mortgages in such cases may have contributed toward lowering the usual interest allowed on the mortgage, and may thus have prevented the whole of the burden of the tax from being shifted to the borrower.

While, therefore, it may be laid down as a general rule that a tax on loanable capital will be shifted from the creditor to the debtor, the conditions which interfere with the absolutely free mobility of capital may be sufficiently strong to prevent this transference of the tax from becoming entirely complete. The application of this principle to the question of taxation of mortgages is obvious, but is of such commanding importance in the United States that it deserves a somewhat fuller discussion.

As a general rule it may be stated that a tax on mortgages assessed to the lender of the money, that is the mortgagee or person to whom the property is mortgaged, will, to the extent that it is a special or exclusive tax, be shifted to the mortgagor, *i.e.* the borrower. The process of shifting will usually take the form of an express agreement in the bond accompanying the mortgage that the borrower shall pay all taxes imposed on the land. Where, however, such agreements are invalid, as is the case in some states, the same result will be attained through an increase in the rate of interest on the loan. Where usury laws exist, restricting the legal rate of interest, and where the mortgage rate plus the tax would exceed the legal rate, the result is the employment of subterfuges which usually involve a slight risk to the lender, with the consequence that the borrower must pay a sum which somewhat exceeds the rate of the tax. In some cases, this addition to the rate of the tax is found even where no usury law exists, or where

the mortgage rate plus the tax is well within the maximum set by the law, and may then be ascribed to the fact that agreements with the mortgagor to pay the tax are void, and that the lender desires to protect himself against the risk of being declared to fall within the prohibition of the law. Thus, in California, where it was provided that the mortgage should be taxed in the locality where the mortgaged property is situated, and that if the mortgagor paid the tax he might recoup it from the mortgagee, agreements to the contrary being void, it has been shown by a careful statistical investigation that after the enactment of the law the interest rate on mortgages, as compared with other classes of investment, rose, not only by the amount of the tax, but by a slight sum in addition.[1]

A more recent inductive verification of the law is found in an investigation carried on in New York. Here, as in many other states, mortgages were subject to the general property tax, but in practice, and especially in the industrial centres, were rarely assessed. Occasionally, however, a mortgage was taxed, and it was estimated by those most competent to judge that in some localities where the general-property-tax rate varied from two to three per cent, the compensation demanded by the lender for the risk of the assessor discovering a mortgage represented somewhat less than one half of one per cent, which would be added to the mortgage rate.[2] In 1905 a new law was enacted, imposing a specific tax on mortgages, and providing for a rigorous enforcement, the tax of one half of one per cent being payable at the office when and where the mortgage was recorded. Mr. Lawson Purdy, then secretary of the New York Tax Reform Association, thereupon procured a complete transcript of all mortgages recorded for six months in several typical counties, as well as of all mortgages recorded in certain adjoining counties in Massachusetts and Pennsylvania, mortgages in Pennsylvania being

[1] *Cf.* "The Taxation of Mortgages in California," by Carl C. Plehn, in *The Yale Review*, viii (1899), pp. 31–67.

[2] *Report of the Special Committee on Taxation* [the so-called Stranahan Committee], appointed by the New York Legislature of 1899.

specially taxable at a very low rate, and mortgages in Massachusetts being virtually exempt, as explained above. The result of the exhaustive examination[1] was a conclusive corroboration of the general principle, and the ascertainment of two facts: first, that the liability of mortgages to taxation under the old law increased the rate of interest by a mill and a half in some counties, and by as much as three or four mills ($\frac{3}{10}$ of 1% to $\frac{4}{10}$ of 1%) in other counties; and secondly, that the new so-called annual mortgage tax of one-half of one per cent augmented the rate of interest by more than the amount of the tax. The evidence was so overwhelming that the opponents of the system were able to secure the repeal of the law and the substitution in its stead of a so-called recording tax whereby mortgages are not subject to a periodical assessment, but are taxed only once, when they are recorded.

While the general rule may thus be declared to be established beyond peradventure of doubt, a more recent investigation into the situation in Wisconsin discloses some of the practical qualifications of the theory as mentioned above.[2] In Wisconsin up to 1901 the system of mortgage taxation was like that in most of the other states, *viz.* a nominal inclusion of mortgages among the taxable personal property, but their virtual escape in large part from assessment. In 1901 a more vigorous assessment under the supervision of the state tax commission was initiated, resulting in the reaching of a large proportion of the mortgages, in some counties as high as ninety per cent. This engendered such widespread dissatisfaction as to cause the repeal of the law and the adoption in 1903 of what is virtually the Massachusetts system, whereby the mortgage is treated as a part of the real estate, with permission to the parties in interest to arrange between themselves as to who should pay the taxes. The result was, as in

[1] *Mortgage Taxation and Interest Rates. Abstracts of Mortgage Records in Certain Counties of New York, Massachusetts, and Pennsylvania, illustrating the Effect of the New Annual Mortgage Tax Law.* New York, 1906. With appendix and diagrams.

[2] *Supra*, p. 331.

Massachusetts, a virtual exemption of mortgages, the lender not being assessed at all and the borrower, while paying the tax, being permitted to deduct the amount of the mortgage from the value of the land. The difference between the rigid taxation in the two years prior to 1904 and the exemption thereafter afforded an admirable opportunity to study the influence of the tax on the rate of interest.

This study was undertaken by Professor T. S. Adams and was published as an appendix to the report of the commission.[1] On comparing the conditions in various counties of Wisconsin and some adjacent counties in Minnesota, where mortgages were also taxable at the local rate, it was found that in some localities, like Menominee County, Minnesota, the rate of interest rose by the amount of the tax, but that in other places, like Clayton County, Wisconsin, there was no appreciable rise at all. The chief points of difference were ascertained to be these: in Clayton County, the tax rate was very low—$\frac{8}{10}$ of 1 %, in Menominee County, it was very high, over $2\frac{3}{4}$ %; in Clayton County the local supply of money was large, and the demand for capital not very great; in Menominee there were practically no local savings and a great need of capital for developing the country; in Clayton County land values were relatively stable and well fixed, in Menominee as a new county land values were still very speculative. The consequence was that, as Professor Adams put it, "a slight contraction of the supply that in Menominee would send interest rates soaring, would exercise no appreciable effect in Clayton."[2]

In other words, the general rule which explains the shifting of a mortgage tax to the borrower may be modified by such considerations as (1) that the tax rate is unusually low, or (2) that the normal rate of interest on mortgages is exceptionally high, or (3) that the demand for capital is inordinately keen, or

[1] *Third Biennial Report of the Wisconsin Tax Commission*, Appendix B, 1907. A summary of the conclusions will be found in an article by Professor Adams on "Mortgage Taxation in Wisconsin" in the *Quarterly Journal of Economics*, xxii (1907), pp. 1–27.

[2] *Op. cit.*, p. 17.

(4) that the stability of land values is not sufficiently assured to attract an influx of capital from the outside and thus to affect the supply. It must, however, not be overlooked that while such cases may obviously occur in a new country the fact that they tend to become more and more infrequent is scarcely open to doubt.

When, as is usually the case, a tax on mortgages is shifted, the ulterior effects are sometimes difficult to disentangle. If the money is borrowed on agricultural land, the effect is precisely analogous to that of the land tax discussed above.[1] If the money is borrowed on city real estate, it may have a series of wide consequences. In the United States, *e.g.* improvements on vacant sites are made, as a general rule, with borrowed money, the builders' loans aggregating a very large percentage of the total investment. A mortgage tax consequently presses with severity on the encumbered real estate, and becomes to all intents and purposes a tax on the buildings. This, as we know, will tend to diminish building operations until rents are increased, with ultimate effects on the entire community. Thus here again it does not suffice to limit the study of the effects of taxation to the question of the original assessment or the initial shifting.

3. *The Incidence of a Capital Tax as between Producer and Consumer*

This is practically the same as a tax on profits. The investor of capital in a productive industry does not make any but an arbitrary distinction between his interest and his profits on the investment. The rate of interest is fixed by the relative amount of loanable capital, that is, it is a matter of adjustment between borrower and lender. But as soon as it becomes a question of adding the tax to the price of the goods the problem is the same as that of the tax on profits. This topic is of sufficient importance to demand a separate chapter.

[1] *Supra*, chap. ii.

CHAPTER V

Taxes on Profits

In discussing the incidence of a tax on profits, as between producer and consumer, it is necessary to make several distinctions. Profits may be taxed directly, as when the tax is imposed on the net receipts or profits of the producer; or they may be taxed indirectly, as in the case of a fixed license, or of a tax on stock in trade, or of a tax on sales. Taxes on sales, however, may themselves be subdivided into two categories. The producer may, in the one case, be taxed on the amount of commodities produced or sold by him. This is equivalent to a so-called indirect tax on commodities. It is immaterial, from the standpoint of incidence, whether such a tax is raised from the producer or from the consumer. In the other case, the producer may be taxed, not on the quantity produced, but on the gross receipts from sales — which is not necessarily the same thing. As an indirect tax on profits, a tax on gross receipts occupies, as it were, an intermediate position. It is, in some sort, a cross between a tax on net receipts and a tax on the quantity sold.

Consequently, if we use the term "profits" in the wider sense, to signify the revenue which accrues from the sale or exchange of commodities, there are really four chief kinds of taxes which affect profits and thus influence the relation between producer and consumer. These are: —

1. A tax varying with gross production or gross amount sold.
2. A tax varying with gross receipts.
3. A tax varying with net receipts.
4. A tax of fixed amount.

1. *A Tax on Gross Production or Gross Amount sold*

This is practically the same as a tax on commodities. Whether the tax is a so-called "indirect" tax, levied on the commodities, or whether it is levied on the producer according to each unit produced or sold, is immaterial. Thus, in some of the American commonwealths, the taxes on sewing-machine companies or telephone companies are proportioned to each sewing-machine or telephone sold or produced. This is the same, so far as the question of incidence is concerned, as if an indirect tax had been levied on each machine or telephone.

Let us mention first the case of a tax on particular commodities produced or sold under the law of competition. This case is the normal one which has been treated above in the chapter on general principles. We have, therefore, only to repeat the general conclusions there reached,[1] namely, that the tax is apt to be shifted to the consumer in whole or in part, but that the degree to which the tax is shifted varies inversely as the elasticity of the demand and directly as the elasticity of the supply.

In most cases the tendency of an increase in price is to diminish the demand and, therefore, the output; but if the falling off in demand is so slight that the former marginal producer still remains the marginal producer, or if the margin between the price and the cost to the more efficient producer is so slight that he cannot crowd out the former marginal producer, then the whole of the tax will be shifted to the consumer. This is a frequent case — perhaps even the ordinary case — under the régime of competition. But conditions may arise under which only a part of the tax will be shifted. These conditions will be present when an industry has not only reached the point of diminishing returns, but has for some time been obeying that law, so that any increase of price due to the tax will lead to a smaller output with a lower

[1] *Supra*, p. 248.

marginal cost, and therefore to a new price below the old price with the whole tax added.[1] But the same result — the incomplete shifting of the tax — will follow when, owing to the imposition of the tax, the former marginal producer is now replaced by a new marginal producer who can supply the product at a lower cost, and when the new price will now be a little (or perhaps even much) less than the old price, or the old marginal cost, with the tax added. The ordinary conditions of progress, as we know, result in a continual crowding out of the marginal producer by more favored competitors. This process will be accelerated, and the marginal producer will be replaced more quickly, as we have seen: first, when the demand for the commodity is very elastic; second, when there is a great difference in the efficiency of the various producers; and third, when the industry obeys the law of increasing rather than of diminishing returns.[2]

To the extent that the imposition of a tax hastens this process, the tendency will be that somewhat less than the whole of the tax will be shifted. For the entire tax will be shifted only so long as the old marginal producer still remains. To what degree, now, will a tax accelerate this process?

A tax on output — that is, on each unit produced — will normally affect the elasticity of the demand, and thus the amount produced. If this diminution of output is divided proportionally among all competitors, it will not change their relative positions. But if there is a great difference in the efficiency of the various producers, and if the imposition of a tax, by making it more difficult for the marginal producer to hold his own, brings about a greater diminution in his output than in that of his competitors, the tendency for the larger producer to crowd out the smaller will be accentuated; and, because of the economies in production, somewhat less than the entire tax will be added to the price. If, however, the movement toward concentration goes far enough to produce a complete monopoly, price will be fixed by conditions

[1] *Cf. supra*, p. 245. [2] *Cf. supra*, pp. 243, 244.

of monopoly value to be discussed in a moment; and while ordinarily only a part of the tax or the whole tax will be added to the price, exceptional cases may occur where the monopoly is so secure and the demand so stable that the new price may even exceed the old price with the tax added. A good example of such an exceptional result is the match tax during the Civil War.[1]

When the competitive industry obeys the law of increasing returns, it is necessary to make a distinction. The fact that an industry is subject to the law of increasing returns tends, as we know, strongly toward concentration; but as long as the old competitors are left — that is, in the interval during which the old marginal producer continues to produce — the smaller output, due to the imposition of the tax, will be supplied at a higher marginal cost, and the new price will not tend to be less than the old price with the tax added.[2] But after the process has been completed — if it is ever completed — and the industry is now monopolized, the price may not be quite so high as before, because under conditions of monopoly, other things being equal, it is conceivable that costs may be reduced and the point of maximum monopoly revenue may be lower. The interesting corollary from the above considerations is that in the transitional cases of competitive industries subject to the law of increasing returns, the tendency toward monopoly is checked rather than accelerated by a tax on output; while, in the usual case of competitive industries subject to the law of diminishing returns, the imposition of a tax — under certain conditions at least — may weaken the forces that oppose the tendency toward monopoly and may make it more difficult for the small producer to remain in business.

We may sum up, therefore, by saying that in the case of competition the usual result of a tax on output or gross amount produced or sold is that the entire tax will be shifted to the consumer, but that special cases may arise where the price will be augmented by only a part of the tax. Such

[1] *Cf. supra*, p. 354. [2] *Cf. supra*, p. 245.

special cases are chiefly to be found not only when the industry has been obeying the law of diminishing returns, but also when the tax enables a more capable producer to undersell his former competitors at the margin of profitable production.

We come next to the case of a monopoly. The law of monopoly value is, we remember, in some respects different from that of competitive value. The monopolist will always demand the very highest price at which he can sell the greatest number of products. To the extent that his monopoly is complete he is uninfluenced by the fact that the article might be produced more cheaply by others, — a consideration of vital importance in the whole domain of competitive prices. So far as concerns the incidence of the particular tax with which we are at present dealing — namely, that on gross production or on commodities — the monopolist and the competitive producer are, however, in some respects subject to practically the same influences.

If a tax is imposed on every article produced, the monopolist may prefer to restrict his production and to raise his price. Although he sells less than before, because of the increased price, his net profits may be larger, because he pays a smaller tax than he would pay if he produced more extensively. Although his gross receipts diminish, his expenses diminish still more. If the tax is small and the demand is apt to fall off a great deal with an increase of price, the monopolist will be likely to find it profitable to bear more of the tax himself. If, on the other hand, the demand is less elastic, he will be apt to shift more and more of the tax to the consumer. The degree to which he will add the tax to the price depends chiefly on the height of the tax as compared with the extent of the production and the elasticity of the demand. In these respects the influence of a tax under conditions of monopoly is akin to that of a tax under conditions of competition. On the other hand, while the tax will ordinarily be shifted in whole or in part, it may happen that no part of the tax will

be shifted at all.[1] Let us proceed to consider this possibility somewhat more in detail.

Let it be assumed that a monopolist can sell, at the price of \$5 each, 1000 units of a particular article. Let it be further assumed that the cost of each unit is \$2. His gross receipts will then be \$5000, and his net profits $(5-2) \times 1000 =$ \$3000, which may be declared to be his maximum monopoly revenue. If he charged more, the sales would fall off; if he charged less, the receipts would be smaller. In either case his net profits would diminish. Let it be assumed that, if he charged \$6 a unit, the sale would fall off to 700 units. His gross receipts would be $6 \times 700 =$ \$4200, and his net profits $(6-2) \times 700 =$ \$2800, or less than before. If, on the contrary, he charged only \$4 a unit, his sales would increase, let us say, to 1200 units, his gross receipts would be \$4800, and his net profits $(4-2) \times 1200 =$ \$2400. He will therefore always prefer the price \$5, which marks the point of maximum monopoly revenue.

If the government now imposes a tax of \$1 a unit, what will be the result? The net return on each unit is reduced to \$2, the total net profits to \$2000. If the monopolist attempts to add the whole tax to the price, he will sell only 700 units; and since the cost per unit has been increased by

[1] Professor Graziani, in his *Istituzioni di Scienza delle Finanze*, 1897, p. 335, substantially accepts, on this particular point, the argument in the text. Professor Edgeworth, who originally criticised the statement in the text in the *Economic Journal*, vii (1897), p. 227, made the same criticism of Professor Graziani's subsequent acceptance of this position in a review of the latter's work in the *Economic Journal*, vii, pp. 405, 406. Professor Graziani came to the defence of his position in a reply entitled *Sulla Repercussione delle Imposte nei Casi di Monopolio*, published in the *Studi Senesi*, xiv, p. 5, and also separately (Turin, 1898). A rejoinder to this by Professor Edgeworth appeared in the *Economic Journal*, viii (1898), pp. 234–236. In 1899 Professor Edgeworth returned to the charge in an article entitled "Professor Seligman on the Mathematical Method in Political Economy" in the *Economic Journal*, ix, pp. 286–315. Three years later Professor P. Jannacone summed up the entire controversy in a monograph, *Questioni Controverse nella Teoria della Traslazione delle Imposte in Regime di Monopolio*. Turin, 1902. *Cf.* also the article by Natoli, "I Valori di Monopolio" in *Riforma Sociale*, 1900, pp. 329 *et seq.* and 429 *et seq.*, and Graziani, *La Teoria Generale della Ripercussione delle Imposte*, 1899, pp. 6–18.

the tax to \$3, his net profits will be $700 \times (6-3) = \$2100$. Granting that this is the highest net return that the new conditions admit, the monopolist will increase the price from \$5 (which gives him \$2000 profits) to \$6 (which gives him \$2100 profits). The entire tax will be shifted to the consumer.

On the other hand, suppose that the tax is only $\frac{1}{4}$ of a dollar. Then the cost per unit would be $\$2\frac{1}{4}$, the net profits at price \$5 would be $(5 - 2\frac{1}{4}) \times 1000 = 2\frac{3}{4} \times 1000 = \$2750$; while the net profits at price \$6 would be $(6 - 2\frac{1}{4}) \times 700 = 3\frac{3}{4} \times 700 = \$2625$. Admitting that other prices yield profits likewise inferior, the monopolist would continue to charge only \$5; that is, he would not raise prices at all.

It might be said, however, that the admission in the last sentence is not permissible.[1] A simple arithmetical example, however, will show that the conditions may arise under which any other price than the original one would give the monopolist less net profits.

Let it be assumed that, instead of adding the whole tax to the price, the monopolist adds only part of it. Let it be further assumed that at price $\$5\frac{1}{4}$ he will sell 900 units; at price $\$5\frac{1}{2}$, 825 units; at price $\$5\frac{3}{4}$, 750 units; and, as we have already previously stated, at price \$6, 700 units. His net profits, then, after a tax of $\frac{1}{4}$ of a dollar had been imposed, would be: —

At price 5 . . .	$(5 - 2\frac{1}{4}) \times 1000 = 2\frac{3}{4} \times 1000 = \$2750.$
At price $5\frac{1}{4}$ . . .	$(5\frac{1}{4} - 2\frac{1}{4}) \times 900 = 3 \times 900 = \$2700.$
At price $5\frac{1}{2}$ . . .	$(5\frac{1}{2} - 2\frac{1}{4}) \times 825 = 3\frac{1}{4} \times 800 = \$2681.25.$
At price $5\frac{3}{4}$ . . .	$(5\frac{3}{4} - 2\frac{1}{4}) \times 750 = 3\frac{1}{2} \times 750 = \$2625.$
At price 6 . . .	$(6 - 2\frac{1}{4}) \times 700 = 3\frac{3}{4} \times 700 = \$2625.$

In other words the monopolist will continue to find his greatest profits in continuing to charge the original price, \$5. It is clear, therefore, that cases may arise in which it will be

[1] Professor Edgeworth, for instance, urges this criticism. The only cases in which it is possible for the monopolist to bear the whole tax himself, says he, are (*a*) when it is not in the power of the monopolist to increase his output, and (*b*) when the monopolist is the sole buyer. Cf. *Economic Journal*, vii, p. 227. That these are not the only cases, however, is clear from the argument in the text.

profitable for the monopolist to bear the burden himself.[1] No part of the tax will then be shifted to the consumer.

Granting, however, that this is exceptional, and that in ordinary cases the monopolist will shift at least a part of the burden, it may be stated that after the point of maximum monopoly revenue has been reached the more elastic the demand, the smaller will be the proportion of the tax that he is apt to shift to the consumer. It may

[1] Cournot states that the tax must always be shifted (except in the cases mentioned in the preceding note). Professor Edgeworth (*Economic Journal*, vii, p. 405) thinks that this is true "in general." Later, when hard pressed by Professor Graziani, he seeks to maintain his position by assuming that "the change of price is small," "by taking Δp *sufficiently small*" (*Economic Journal*, viii, p. 235). But is it fair to assume that a small change of price is "more general" than a great one? And would Professor Edgeworth's elaborate formulæ all hold good, if the change of price were substantial? It is not denied that, if we varied the figures in the text, it might happen that when the cost per piece was $2\frac{1}{4}$, the price which yields maximum profit might become greater than 5. What it is sought to prove by the above illustration is that this result does not necessarily follow. We venture, therefore, still to cling to the position in the text, notwithstanding that, in the opinion of Professor Edgeworth, the opposite point has been "proved formally and mathematically by Cournot, informally and in plain prose" by himself. See *Economic Journal*, vii, p. 405, note 1. Wicksell, on the other hand, thinks that, theoretically, the monopolist will always add the tax to the price, but that practically he will often *not* do so. — *Finanztheoretische Untersuchungen*, p. 12. In his reply in the *Economic Journal*, ix, p. 307, Professor Edgeworth concedes the accuracy of the above figures, but contends that "it was not necessary in an article on *pure theory* to notice this obvious limitation, which may fairly be relegated to the category of *friction*." — In his *Istituzioni di Economia Politica*, 1904, pp. 232–236 (2d ed., 1908, pp. 242–246), Professor Graziani restates his position at some length. In his review of this passage in the *Economic Journal*, xiv (1904), p. 607, Professor Edgeworth concedes that Graziani is "formally correct," although he now still maintains, not the error, but the "insignificance" of the proposition. — Professor Jannacone, in reviewing the controversy, points out that Professor Edgeworth has omitted properly to estimate the degree of approximation of the abstract proposition to the actual facts. His proposition is what Jannacone calls one of first approximation only, resting on the two hypotheses, (*a*) that the monopolist can vary the price for infinitesimal quantities, and (*b*) that to every variation in price, however small, there corresponds an inverse variation in demand. These two hypotheses, however, as Jannacone proves in great detail, are far from being necessarily true; and with the disappearance of the suppositions the seemingly irrefragable law of Professor Edgeworth itself disappears. — Jannacone, *Questioni Controverse, etc.*, pp. 12–16.

be wise to illustrate this also by some simple arithmetical figures.[1]

Demand is said to be more elastic when each successive increase of price leads to a greater falling off in demand. The example above was based on the assumption that, at the price of \$6, the demand would fall to 700. Let us now assume that, with a more elastic demand, the sales at price \$6 would fall off as far as 675 units; and let us further assume that, with a more stable demand, the sales at the price \$6 would fall off only to 725 units. Now, with the more elastic demand, the net profits would be, after the tax of \$1 per unit was imposed $(6 - 3) \times 675 = \$2025$; but with the less elastic or more stable demand, the net profits would be $(6 - 3) \times 725 = \$2175$. Hence, the more stable the demand, the greater the chances of his increasing the price by the whole tax.

The validity of this statement may be seen from a *reductio ad absurdum* of the opposite. Suppose it were true that, the more elastic the demand, the greater the chance that the monopolist would add the tax to the price. Then it would follow that, if at the price of \$6 the demand fell off to 500, the net profits of the monopolist would be $(6 - 3) \times 500 = \$1500$; if to 400, then $(6 - 3) \times 400 = \$1200$; if to 300, then $(6 - 3) \times 300 = \$900$, and so on. In other words, the monopolist would, in each case, prefer the smaller net profits to the higher ones — which is absurd.[2] It remains true,

[1] Especially because the proposition has recently been assailed, again by Professor Edgeworth, in *Economic Journal*, vii, p. 227, note 4, and in his criticism of Professor Graziani's acceptance of the above contention in *ibid.*, vii, p. 406, and viii, pp. 237, 238. For Professor Graziani's rejoinder, see *Sulla Repercussione*, etc., pp. 6, 7. See also Professor Edgeworth's answer to the argument in the text in the *Economic Journal*, ix, pp. 302–306, and the summary by Jannacone, *op. cit.*, pp. 16–21.

[2] The contention of Professor Edgeworth depends on the assumption that the demand curve is continuous,—that, if an increase of price leads to such a sudden falling off in demand, a decrease of price will lead to a similar jump in demand. But this does not necessarily follow.

In the *Economic Journal*, ix, p. 307, Professor Edgeworth concedes that his argument rests on the postulate of continuity, which he thinks is true "in general in the great majority of cases which occur in ordinary practice." This is, how-

therefore, that the degree to which the tax will be added to the price varies, other things being equal, inversely with the elasticity of the demand.

ever, precisely the point at issue. The argument in the text is designed to show that the régime of monopoly may differ from that of competition. My assumption is that of a demand which becomes more or less elastic after the point of maximum monopoly revenue has been reached. Professor Edgeworth's assumption is that of a demand which is more or less elastic from the outset, before as well as after this point. Professor Edgeworth's contention that my assumption is illicit seems to be quite arbitrary.

Professor Jannacone in reviewing the controversy in his *Questioni Controverse*, pp. 17–18, explains very clearly the exact nature of the point at issue. He says: "However inelastic the demand, the increase of price always finds a limit in the amount of income which the marginal purchasers are willing to sacrifice. The less elastic the initial demand, the more easily will the price reach a limit beyond which the demand will fall to zero. Hence if the demand for a monopolized article is inelastic, the monopolist will force the price almost up to the price limit, and if a tax is imposed the monopolist will raise the price only slightly because of the lessening of the margin between the new price and the price limit. . . . This lessening of the margin, however, can mean only that an originally inelastic demand acquires an enormous elasticity as soon as the price reaches a certain point. It is hence this enormous elasticity of the demand at a given point, and not the initial inelasticity, which is the true cause of the difficulty experienced by the monopolist in raising the price after the imposition of the tax; for the initial inelasticity influences the situation only in so far as it hastens the attainment of a price relatively near the price limit."

"Hence, in the case of two demands in each of which the maximum monopoly-revenue price is found at the same point, but where after this point the one case exhibits a greater, and the other a smaller elasticity, the increase of price after the imposition of a tax will evidently be easier in the case of the more inelastic demand. For this flows naturally from what was said above; namely, that in the case of a demand which is more elastic after the point of maximum monopoly revenue has been reached, the margin between the new price and the price limit will be more narrowed than in the case of a less elastic demand."

Professor Edgeworth, indeed, almost at the close of his discussion, in correcting his previous statement, now thinks that it is impossible by mathematical reasoning to come to any definite conclusion whatever in the matter: "In any given case it is impossible to say whether the increase of elasticity conduces to the increase or the decrease of the efficacy of a tax to raise price, unless we are given the *curvature* of the demand curve, which is not, I think, usually given, as to sign, much less with the quantitative precision which would often be necessary for the present purpose." —*Econ. Journ.*, ix, p. 312. He adds (p. 313) that to this extent "I have to retract my original statement." He still thinks, however, that my statement in the text (*supra*, p. 345) as to the condition of the consumer is erroneous "if the situation of the consumer is tested . . . not so much by the rise

We see then that the validity of the general law as stated above[1] is substantiated, and that in the case of monopoly the degree to which the price will be increased by a tax depends upon the height of the tax as compared on the one hand with the ratio of product to cost, and on the other hand with the elasticity of the demand.

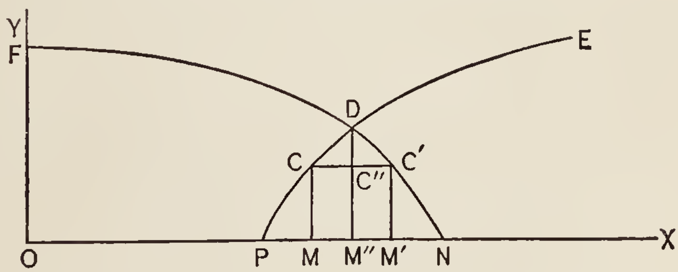
If we consider the ulterior effects of a tax on the gross product of a monopoly, some interesting conclusions force themselves on our attention. Let us take up those cases in which the monopolist will generally add the tax to the price. To this extent he will have shifted the tax to the consumer; but that does not mean that he suffers no loss. On the contary, since the increased price means reduced sales, the net profits of the monopolist will, as we have seen, be smaller than before the tax. He therefore loses also. The tax he pays to the government is, indeed, smaller than it would have been if he had continued to produce as much as before; and in this sense we can speak of a partial evasion of the tax. That is, taking the figures used above in the illustration of normal conditions, the tax of $1 per unit amounts to $1000 when 1000 units are sold; but since the change of price from $5 to $6 cuts down the sales to only 700 units, the government then receives only $700. The producer thus evades the tax to the extent of $300, but he also suffers a considerable loss. For, while his net profits before the imposition of the tax were $3000, his net profits, after he raises the price by the entire amount of the tax, are only $2100. He thus loses $900, although he technically shifts the tax. Moreover, the consumers also lose. Those who pay the increased price can measure their loss in dollars and cents; for, if the tax is shifted completely, they pay the total amount of the tax. Those who have been compelled, by the increase of price, to forego the article and to content themselves with something inferior, also suffer a loss, even though it cannot be definitely

of price as by the loss of consumer's surplus." As my argument, however, was addressed precisely to this question of the rise of price, the objection does not seem very weighty.

[1] *Supra*, p. 342.

expressed. The only persons who gain are the producers of the new commodity which some of the consumers now substitute for the old one. This gain, however, which also cannot be expressed numerically, will ordinarily be smaller than the loss suffered by the producers of the original article. Even though a tax on gross product be shifted to the consumer, in the sense of causing a rise in price, it is apt to inflict a loss on the producer as well as on the consumer; and this loss to both classes may exceed the total yield of the tax to the government. In the above extreme case the producers lose $900, the consumers, whose loss can be computed numerically, lose $700, or $1600 together, while the tax yields only $700. The possible dangers of taxes on gross product are thus apparent.[1]

[1] The above reasoning may be illustrated graphically as well as arithmetically. Fleeming Jenkin, "On the Principles which Regulate the Incidence of Taxes," in *Proceedings of Royal Society of Edinburgh*, Session 1871–1872, p. 624 (republished in *Papers, Literary, Scientific*, etc., by the late Fleeming Jenkin, edited by Colvin and Ewing, 1887, ii, p. 113), made use of the following diagram: —



FN is the demand curve, *PE* the supply curve, *CC′* the amount of tax per unit. Then *OM* is the market price to the supplier, *OM′* the market price to the buyer, and *MM′* the tax.

The amount raised by the tax is *MCC′M′*, the portion paid by the seller *CC″M″M*, the portion paid by the buyer *C″C′M′M″*. The whole loss to the community is *MCDC′M′*, the loss to the sellers *CDM″M*, the loss to the buyers *M″DC′M′*. Both buyers and sellers suffer a loss beyond the tax. The sellers suffer a loss *CC″D*, the buyers suffer a loss *C′C″D*. If the tax is large, *CC′* will approach the axis *OX*. Then the tax will be unproductive, and the excess of loss to buyers and sellers, *CC′D*, will be large.

Of course, according as the industry obeys the law of constant returns, or of increasing returns, the supply curve *PE* will tend to curve differently. Conversely, according to the elasticity of the demand, the demand curve *FN* will tend to be

The case of a bounty is just the reverse of a tax. It can be proved in the same way that, while a bounty ordinarily benefits only the producer and brings no advantage to the consumer, cases may possibly occur where the result of a bounty will be not only an increase of the profits of the producer, but also a decrease of the cost to the consumer. This is the reason why bounties have generally been given; namely, to educate the producer to that point where he may find it profitable to reduce prices. But these instances are very exceptional, just as was the preceding case of a tax that cost the producer and the consumer far more than it yields to the government. Such cases, moreover, cannot be advanced as arguments in favor of the policy of bounties in general; for, ordinarily, the loss occasioned to the taxpayers who pay in taxes the amount distributed as a bounty more than outweighs the benefits to the special classes who are deemed to derive a benefit from the bounty. It is for this reason that modern governments grant bounties only in the exceptional instances mentioned above.

Returning now to the consideration of taxes on gross product in general, irrespective of the fact whether the industry is subject to the law of monopoly or of competition, attention must be called to a point in which many have committed a serious error. Cournot, for instance, maintained that a tax, whether on a monopoly or on a competitive commodity, may raise the price to an extent greater than the amount of the tax. One of the reasons he advanced for this phenomenon was that the price paid by the consumer must include not only the tax but the interest on the sum necessary to pay

parallel to EO. Jenkin did not modify his diagram to meet these conditions. But Professor Marshall has made the changes in his *Principles of Economics*, 3d ed., pp. 523–525, to which the reader is referred. Marshall, however, applied his diagrams only to consumers' rent, *i.e.* to what Jenkin called $C'C''D$. It is equally applicable to the producers' rent. The whole analysis is outlined by Cournot in his *Recherches sur les Principes Mathématiques de la Théorie des Richesses* (1838), pp. 78–82 (English translation, pp. 71–75), and more especially in his *Principes de la Théorie des Richesses* (1863), pp. 374–378.

the tax, and the profits of the middlemen. The necessary conclusion was that it is always wiser to assess the tax at as late a stage as possible — that is, on the consumer himself — since the collection of the tax becomes more costly, more vexatious, and more burdensome to the community in proportion as the assessment of the tax approaches the producers. The consumers will have to pay more than the government receives.[1]

This theory of Cournot is, however, nothing but the accepted doctrine of Adam Smith, Ricardo and Mill which they took from the earlier writers of the eighteenth century. Several of these authors have been mentioned above.[2] The view had become quite common by the time of a writer called Bricknock, who gives the phenomenon the name of *super-taxation*.[3] Adam Smith puts the idea into the plainest form when he says: —

"A tax upon these articles (necessaries of life) necessarily raises their price somewhat higher than the amount of the tax, because the dealer who advances the tax must generally get it back with a profit. His employer, if he is a manufacturer, will charge upon the price of his goods this rise of wages, together with a profit; so that the final payment of the tax, together with this exchange, will fall upon the

[1] Cournot argues on p. 78 of the *Principes Mathématiques* (English translation, p. 70) that, owing to the "additional charges arising from interest," "the commodity will be sold at a higher price just in proportion as the tax is prematurely collected." *Cf.* the corresponding statement in his *Principes de la Théorie des Richesses*, p. 273, as to competitive conditions.

[2] See *supra*, pp. 29, 80, 102, etc. The common view is well reflected in *The Policy of the Tax upon Retailers considered; or a Plan in favor of the Manufacturers*, London, 1786, p. 29, as well as in *Thoughts on Capital Taxation: in the course of which the policy of a Tax on Incomes is impartially investigated.* London, 1798, p. 11.

[3] *A Treatise upon Perennial Ways and Means, with other Political Tracts inscribed to the King.* By T. Bricknock, London, 1762, p. 2. It is worthy of mention that the author first suggested the use of stamps, as the method of taxing commodities when on the way to the hands of the consumer — a suggestion which was not adopted until after a century later when the United States government introduced it into its internal revenue system at the instance of David A. Wells. — *Op. cit.*, p. 7.

consumer. The final payment of both the one and the other (taxes on necessaries and on labor) falls altogether on themselves (the consumers) and always with a considerable overcharge."[1]

So also this is what Ricardo means when he says that "the taxing of all commodities will raise the price by a sum at least equal to the tax,"[2]—a remark which, as we have seen, is not necessarily true. Du Puynode, Parieu, and many other writers make the same statement. Fawcett goes so far as to call this the most serious objection against taxes on commodities.[3]

The excess-of-tax-above-price theory was opposed, shortly after its formulation by Adam Smith, by Hamilton, in the work mentioned above.[4] "It is by no means a new opinion," says Hamilton, "that taxes, in passing from hand to hand, accumulate like a snow-ball, until they come to the last payer."[5] Hamilton, on the other hand, maintains that "taxes are absorbed by the improvement," that "they cannot be accumulated," but that, on the contrary, "taxes become lighter, in proportion to the number of hands through which they pass, in a thriving society."[6]

Hamilton, however, did not approach the subject from the modern point of view. The whole excess-of-tax-above-price theory rests on the old doctrine of normal or natural profits. As soon as we remember that, according to the modern theory, actual profits are simply the surplus over marginal cost, the doctrine falls to the ground. The middleman can-

[1] *Wealth of Nations*, book v, chap. ii (Rogers' ed., ii, pp. 468–470).

[2] *Principles of Political Economy and Taxation*, chap. xvii (McCulloch's ed., p. 186). *Cf.* Mill, *Principles*, book v, chap iv, § 2.

[3] Du Puynode, *De la Monnaie, du Crédit et de l'Impôt*, ii, p. 210; Parieu, *Traité des Impôts*, i, p. 165; Sayer, *The Income Tax*, 1833, pp. 58, 59; Fawcett, *Political Economy*, pp. 550, 551 (6th ed.). A recent repetition of the statement is by Sidney and Beatrice Webb in their *Industrial Democracy*, 1898, p. 303. "At every 'repercussion' of the tax, there would be an additional 'loading,' so that the ultimate charge to the consumer would, as in the case of excise duties on raw materials, far exceed the original sum."

[4] *An Enquiry into the Principles of Taxation*, 1790. *Supra*, p. 155.

[5] *Op. cit.*, p. 145.

[6] *Op. cit.*, pp. 159, 190.

not add his profits to the price, because in a state of competition price is fixed at any given moment at the cost of the most expensive increment. If there were such a thing as normal profits, the price of the article would indeed be increased with each transfer, until the ultimate price might immensely exceed the tax. But under competitive conditions, there is always a producer or middleman on the margin of production — that is, one who produces or handles the product without profits, simply getting back his expenses — and the price of the whole supply, at any given moment, is equal to his cost of doing the business. The profits are obtained only by the more fortunate or more skilful individuals. The mere fact that the product passes through a number of hands cannot in itself raise the price by more than the exact cost of such transference. Cost, however, does not include profits; cost is the condition of profit. Otherwise retail prices would increase geometrically, according to the number of retailers — a conclusion which is obviously untrue. The tax is simply an addition to the cost of production; and there can be no geometrical increase in the tax. As soon as we abandon the normal-profits theory, then, we see how inaccurate is the excess-of-price-above-tax doctrine. The doctrine assumes not only that the producer is a monopolist, but that every middleman is a monopolist also. Only on this assumption can there be a no-profits middleman. The assumption, however, is not practicable in treating of the conditions of actual life.[1]

It might indeed be claimed that even though profits are not a part of cost, interest is, and that the excess-of-tax-above-price doctrine is still valid in this modified sense, as far as interest is concerned. This may be conceded, but the practical effect is so insignificant that the theory is virtually robbed of all its vitality. For the interest is charged only on the amount of the tax, and for the short period which elapses between each successive transfer. When the tax is only a

[1] Cf. Gunton, *Principles of Social Economics*, p. 380. His conclusions are in other respects, however, questionable.

fraction of the original selling price, the interest for the elapsing interval becomes the merest fraction of a fraction, and is practically negligible.[1]

There is, indeed, one way in which the price of an article may be driven up beyond the amount of the tax — a way suggested in the last sentence, but involving considerations very different from those just discussed. Since a tax on production or on commodities must generally be advanced before the producer has received payment for his sales, the necessity of raising the funds will bear more heavily on the smaller producers. In fact, under given conditions of elasticity of demand, such a tax, especially if it be high, tends to increase the advantages of the powerful producer. When the conditions are sufficiently favorable, the imposition of a tax may thus be the direct cause of the creation of monopoly. But it is then primarily the monopoly, and only indirectly the tax, which enables the producer to raise the price far above its previous level. Conversely, the repeal of a tax may reduce the price by an amount far greater than the tax, because what was formerly a monopoly may now become subject to competition. As a good example of this tendency may be mentioned the tax on matches in the United States during the Civil War, the imposition of which created a monopoly with high prices, and the abolition of which caused a fall in price considerably greater than the amount of the tax. But it is primarily because of the monopoly, and only indirectly because of the tax, that prices are thus raised unduly.[2]

[1] This is overlooked by William Frend, *Principles of Taxation*, London, 1799, p. 16, who limits the theory to the case of interest. *Cf.* his later work, which is more than a new edition, entitled *Principles of Taxation or Contribution according to Means*, London, 1804, pp. 43–44.

[2] There is another case in which a tax may increase the price of a commodity by more than the amount of the tax. This is the case where a smaller tax is imposed on the producer of a larger quantity of units than on the producer of a smaller quantity. In industrial operations in general such a tax is well-nigh unknown. It would be what the French call an "upside down progressive tax." But in agriculture it has happened that a uniform tax is imposed per acre, while

The whole question of the incidence of import or export duties is virtually identical with the one discussed in the preceding cases; for import and export duties are usually levied at given rates per units of the commodities, whether the units be those of weight or of value; that is, whether the rate be specific or *ad valorem*. It will be readily seen, therefore, how erroneous is the doctrine of those extremists who maintain that the loss to the consumer is always and necessarily measured by the proceeds of the import duties. On the contrary, it may happen that prices will rise by something less than the tax; and it is conceivable, although not probable, that prices may not rise at all. When, for example, the foreign producer fears that the increase of price by the total amount of the tax will so materially reduce his sales as to render his net profits lower than they would be if he assumed a part of the tax himself, prices may rise by something less than the tax. On the other hand, it may happen that the loss to the consumer will be more than the amount of the tax. It is impossible to lay down any exact and universal rule; attention must always be paid to the given conditions of the particular case. The application of the principle is so important, however, that it merits a fuller discussion, which will be reserved for another chapter.[1]

2. *A Tax on Gross Receipts*

A tax on gross receipts must not be confounded with a tax on sales (in the sense of a tax proportional to the number of commodities sold) or with a tax on gross product. A tax on sales or on product varies with the amount sold or produced. But gross receipts may be larger with small sales than with large sales, provided prices are higher. Conversely, gross

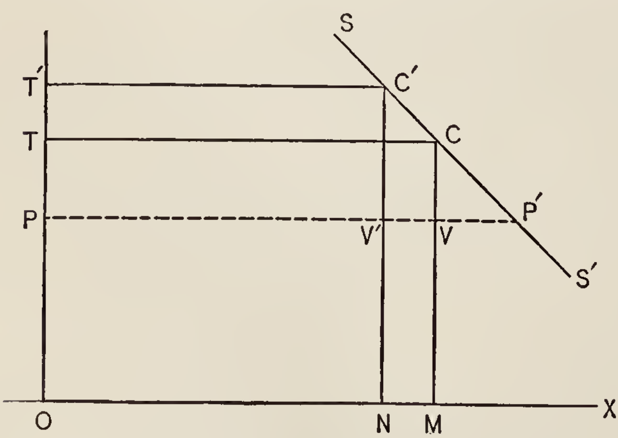
the productivity of the land varies. In such a case, the tax would involve a lower rate, per bushel of wheat for instance, on the more productive land than on the less fertile land; and, as long as the less fertile land contributed a part of the necessary supply, the price of the product would rise by more than the amount of the tax. The case is worked out arithmetically above on p. 260.

[1] *Cf. infra*, chap. vii.

receipts may be smaller with large sales than with small sales, provided prices are lower.

If we take up first the case of competition, it is clear that there can be in the given market only one price—that equivalent to the cost of production of the dearest increment of the temporary supply. Now a tax on gross receipts necessarily increases the expenses of this dearest increment; for the producer at the margin of profitable production, whose gross receipts afford him only a bare return for his outlay, without any profits, must add the tax to his price, if he is to remain as a competitor at all. In the end, therefore, the tax must be shifted. The extent, however, to which the tax will be shifted at any particular time will depend on the considerations that were discussed in the case of a tax on gross product; that is, on the elasticity of the demand as compared with the elasticity of the supply.

In the case of monopoly the same effects are also generally observable. Although the increase of price will lead to a falling off in the demand, and although the gross receipts may even be less than before, the net profits of the monopolist will generally be greater, because of the diminution of the expenses due to the decrease of the output, and because the tax on the reduced gross receipts will be less than it would have been had the sales remained unchanged.[1]



[1] This general shifting of the tax, in whole or in part, can be illustrated by a diagram.

At price OT let OM be sold; at price OT' let ON be sold.

Let gross receipts $OTCM$ = \$10,000; let gross receipts $OT'C'N$ = \$8990. (These figures are chosen because they were the ones used in the first edition, in the illustration which is discarded here for the reasons mentioned in the next note.) Let PP' = line of cost. Let cost $OPVM$ = \$7000. Let cost $OPV'N$ = \$6000.

Although it is generally true that a tax on monopoly gross receipts will raise prices, the conclusion does not necessarily follow.[1] Cases may arise where it will be profitable for the monopolist to bear the burden himself. The reasoning as illustrated by the diagram in the note assumes that the falling off of demand with increase of price is not only continuous, but absolutely proportional, and that therefore the demand curve may be represented by a straight line. But it is possible that the demand may fall off largely for the initial increments of price, and less largely thereafter. Let us utilize, in other words, a hypothesis similar to the one already mentioned,[2] where, instead of the demand falling off by 100 units for every one-quarter of a dollar added to the price, the demand at price \$5 amounts to 1000; at price \$5¼, to 900; at price \$5½, to 825; at price \$5¾, to 750; and at price \$6, to 700. If a tax of ten per cent on gross receipts be now imposed, the figures will be as follows: —

At Price	Gross receipts	10 % tax
\$5	5 × \$1000 = \$5000	\$500
5¼	5¼ × 900 = 4725	472.50
5½	5½ × 825 = 4537.50	453.75
5¾	5¾ × 750 = 4312.50	431.25
6	6 × 700 = 4200	420

Then net receipts at price OT = \$10,000 — \$7000 = \$3000. Then net receipts at price OT' = \$8990 — \$6000 = \$2990. The monopolist, then, will prefer price OT.

Now impose a tax of one per cent on gross receipts. With gross receipts \$10,000, tax = \$100. With gross receipts \$8990, tax = \$89.90. Net receipts \$3000 — \$100 = \$2900; net receipts \$2990 — \$89.90 = \$2900.10. The monopolist will now prefer the price OT'.

Hence, after the imposition of a tax on gross receipts, the monopolist will prefer to raise the price. Here, as before, however, allowance must be made for the elasticity of demand and for the ratio of product to cost.

[1] In the first edition of this work the statement was made that such a tax could never raise price. This was an error, due to inattention, in the particular illustration, to the fact that cost changes with the amount produced. The error in the original calculation has been pointed out by several writers, for example, by Professor Ross in the *Annals of the American Academy of Political and Social Science*, iii, p. 460; by Knut Wicksell in his *Finanztheoretische Untersuchungen*, p. 14; and finally by Professor Edgeworth in the *Economic Journal*, vii, p. 228. But some of them, like the writer last named, go too far in asserting that a tax on monopoly gross receipts *must* raise prices.

[2] *Supra*, pp. 344, 345.

The expenses will be the cost of production plus the tax, or

At Price	Cost of production	plus tax	equals total expenses
$5 . . .	2 × $1000 = $2000 +	$500	= $2500
$5\frac{1}{4}$ . . .	2 × 900 = 1800 +	472.50	= 2272.50
$5\frac{1}{2}$ . . .	2 × 825 = 1650 +	453.75	= 2103.75
$5\frac{3}{4}$ . . .	2 × 750 = 1500 +	431.25	= 1931.25
6 . . .	2 × 700 = 1400 +	420	= 1820

Deducting from gross receipts the total expenses, we have the net profits: —

At Price	Gross receipts	minus expenses	equal net profits
$5	$5000	− $2500	= $2500
$5\frac{1}{4}$	4725	− 2272.50	= 2452.50
$5\frac{1}{2}$	4537.50	− 2103.75	= 2433.75
$5\frac{3}{4}$	4312.50	− 1931.25	= 2381.25
6	4200	− 1820	= 2380

That is, the maximum monopoly revenue will as before still be at price $5.

It is, therefore, possible, in the case of a tax on gross receipts as well as in the case of a tax on each article sold, that the monopolist may prefer not to raise the price at all.

3. *A Tax on Net Receipts or Profits*

In the case of a tax on the net profits of a monopolist, it might be assumed that the tax will always be shifted to the consumer because of his necessary dependence on the monopolist. This assumption, however, would be completely false. It makes no difference whether the monopolized commodity is one, the supply of which is strictly limited and which is not reproducible at all, or whether the commodity is reproducible according to the law of constant, diminishing or increasing returns. So far as the producer is concerned, he cannot add the tax to the price; for it may be assumed that the monopolist producer will always demand the highest price which the consumer is willing to give. If the consumers were willing to pay more, he would have increased the price before the imposition of the tax. In other words, since monopoly price is always at the point

of greatest monopoly profits, a tax on these profits can never increase the price. A tax on monopoly profits must, therefore, fall wholly on the monopolist.

In the case of competitive net receipts, we must distinguish between an exclusive and a general tax on profits. A tax on the profits of some particular occupation must, in the long run, be shifted to the consumer, provided that the commodity continue to be produced at all. For if the tax rests on the particular profits, the producers will be put at a disadvantage as compared with those engaged in other industries. There will be a gradual migration of capital to find the most profitable level, and the original industry will gradually be deserted. In the long run, therefore, either the tax will be shifted to the consumer or it will lead to a cessation of production. In the one case, consumers suffer through increase of price; in the other case, they suffer through destruction of consumption. But in no case will the burden ultimately rest on the permanent producer.

We must, however, not forget the following important practical point, which seems to have been overlooked by many. To the extent that the theory of the mobility of capital is not applicable, "the long run" will not occur. When the fixed capital forms a large part, and the circulating capital a small part, of the entire investment, final equilibrium can be brought about only through the ruin and disappearance of the producer. Even where the capital is ultimately transferred, the intermediate effects are often the most important ones. What may be in a sense unimportant from the standpoint of national economy, may be supremely important from the standpoint of individual economy. When we say that taxes cannot, in the long run, remain on the producer, we generalize the conception. The producer merely represents a class of individuals who never disappear. But when we speak of the producers during any interval, we refer to certain individuals. The welfare of producers as a class is something very different from the welfare of an actual producer. Producers as a class ultimately may contrive to

obtain certain average returns; but this may be rendered possible only by the complete ruin of the individuals who are now engaged in production. So far as inequalities of taxation are not constant inequalities, this process will continually repeat itself. The optimistic theory is as much out of place here as it is in the other domains of economic science.[1] In other words, even an exclusive tax on profits may at any given time, under certain conditions, rest on the original taxpayer until he has been entirely driven out of the field. The only result of a tax on profits might then be completely to stop the production of the commodity or the continuance of the business. The consumer would then suffer not through the increase of price, but through the inability to procure the commodity at all.

As an actual fact many of the so-called taxes on business or on corporations are in the nature of special or exclusive taxes. Thus in the United States not only are the corporation taxes in many cases imposed on only special classes of corporations, but various classes of business like banks are often assessed

[1] *Cf. supra*, p. 271, the discussion of the incidence of the tax on the net profits of land. The qualification to the general doctrine as to the incidence of exclusive taxes is admirably expressed by Cliffe-Leslie in the following passage: "Another incidence of a number of taxes on the working classes as producers has been concealed by the doctrine that taxes on particular commodities and particular employments fall on consumers only, not on producers. The theory of taxation abounds in examples of the danger of the abstract and hypothetical method of reasoning in economics. The economist sets out with an assumption surrounded with conditions and qualifications, and perhaps itself open to question, such as that in the long run, and on the average, the profits of different occupations tend to equality, and presently forgetting all his qualifications and conditions, concludes that the profits of individuals must be equal; and therefore all special taxes advanced by producers must come back to them with equal or average profit. Individual profits really, in almost every business, vary from enormous gain to absolute loss. Mill says: 'That equal capitals give equal profits, as a general maxim of trade, would be as false as that equal age and size give equal bodily strength.' Nevertheless it is taken for granted that every special tax on a business is received 'with average profit,' though the net result of all a trader's advances is not unfrequently ruin; though all such taxes give an advantage to the larger capitalists. . . ." — "The Incidence of Imperial and Local Taxation on the Working Classes." In *Essays on Moral and Political Philosophy*, 1879, p. 196. In the 2d ed., under the title *Essays in Political Economy*, this passage is found on pp. 388, 389.

to the general property tax in what virtually amounts to a special form of taxation.

When we have such forms of special taxation it is to be noted that the effects of the tax may vary with the particular way in which it is assessed. Thus when special taxes are levied on the profits of banks, the tax will ordinarily be shifted to the consumer in the shape of a higher charge for transacting the business, that is, in this particular case, by a rise in the rate of interest, with all the ulterior consequences to the whole of the community which flow from an increase in the price of capital. Where, on the contrary, the tax on banks assumes the form, as in many of the American states, of a special tax on bank shares, the bank deducting the tax from the dividends, the tax really becomes one on particular forms of property rather than of business. The result will be a capitalization of the tax, with a corresponding reduction in the value of the shares. Here then the tax will not be shifted, but capitalized.

In some instances, again, the owners are the consumers, as in the case of mutual insurance companies. When a special tax is laid on insurance companies, as is generally true in the United States, there can be no question but that the tax results in a diminution of the dividends on the insurance policies, thus contributing to a decrease in the habits of thrift and foresight. Instead of taxing profits or capital, as is the ostensible aim of the law, the real consequence is to tax expenditure, and that too a particular kind of expenditure, which is in almost all other countries deemed worthy of the special solicitude of the government.

Other examples of special taxes on business profits leading to the reverse of what was originally anticipated will readily occur. A good instance is afforded by the tax on department stores, such as was imposed in the state of Missouri and in some of the German states. In Prussia the consequences have been carefully studied.[1] There the tax in question,

[1] See Hans Gehrig, *Die Warenhaussteuer in Preussen. Ein Beitrag zur kaufmännischen Mittelstandspolitik*, 1905, pp. 65–72.

instead of resting on and repressing the department stores and thus developing the smaller shops, as was intended, had just the contrary effect. The tax was high enough to prevent new department stores of moderate size from being erected, and thus enabled the existing stores to increase their control of the market. Similar instances of the misdirected efforts of the taxing power might easily be mentioned.

A general or universal tax on profits, in the sense of a uniform tax on profits, does not, strictly speaking, exist any more than a general or uniform tax on all capital.[1] But a tax may practically affect so many classes of producers in a given community, and so many different kinds of profits more or less removed from liability to competition from foreign sources, that we are justified in setting up the conception of a general tax, in contrast with an exclusive tax, on profits. Such a general tax on net profits can never be shifted. If profits represent the surplus above cost of production, a general tax on this surplus cannot influence the cost of production. Price cannot be altered, and the interests of the consumer cannot be affected. It is the producer who bears the tax, both immediately and ultimately.[2]

[1] See *supra*, p. 326.

[2] It has sometimes been asserted that in a "seller's market" during a period of rapidly rising prices owing to trade expansion or credit inflation, as during the Great War, even a general tax on profits, like the excess profits taxes in Europe and America, and the corporate income tax in the United States, is apt to be shifted in whole or in part. It is more than probable, however, that the tax was the excuse for, rather than the cause of, the higher prices which were due in the main to entirely different reasons. *Cf.* R. M. Haig, "The Taxation of Excess Profits in Great Britain," *American Economic Review, Supplement*, 1920, pp. 155–157; and David Friday, "Prices and Excess Profits Taxes," *Annals of the American Academy of Political and Social Science*, vol. 89, 1920, 163–169, and *Wages, Profits, and Prices*, 1920, ch. xii.

The Italian, Jarach, thinks that under certain conditions affecting the curve of productivity of investment on the one hand and the cost of saving on the other, even a general tax on profits can be shifted. By that, however, he seems to mean that the general effects on both producers and consumers may be altered. See Cesare Jarach, "Gli effetti di una imposta generale ed uniforme sui profitti" in *Atti della Reale Accademia delle Scienze di Torino*, xlvi (1911), pp. 28 *et seq.*

Some writers, indeed, like Cournot, have asserted that the ultimate effects on the consumer may be bad, because the tax restricts the producers' consumption, and because the employment of the proceeds of the tax is generally less profitable than if the proceeds had remained in the hands of the producer. But this reasoning seems to be defective. It takes for granted that taxes are used unproductively, and it leads logically to the aphorism of Say that the best taxation is that which is least in amount. So far as governmental expenditures are necessary and judicious, they are useful and productive; and it is not permissible to assume that private expenditure is more beneficial than public expenditure. Everything depends on the nature of the expenditure, and on the general views as to the duty and limits of governmental activity. To say that a tax on profits is injurious to the consumer seems to involve a begging of the question. The whole problem, moreover, is not peculiar to a tax on profits, nor is it any longer a problem of incidence: it belongs properly to the wider discussion of the general influence of taxation.

One practical inference from the above discussion may be used in connection with the controversy in the United States as to whether corporation taxes should be levied on gross or on net receipts. Whether these be monopolies or not, the *a priori* conclusion in favor of taxation of net receipts[1] is strengthened by the results of this discussion. In the particular case of transportation companies, for example, around which most of the wordy warfare and the practical contest have waged, it is more likely that the travellers and shippers will feel a tax on gross receipts than one on net receipts.

4. *A Tax of Fixed Amount*

It may happen that a tax is not assessed according to net profits, gross receipts or sales, but that it is imposed in the

[1] See Seligman, *Essays in Taxation*, 9th ed., 1921, pp. 258–270.

shape of a lump sum on all the producers in the industry. This is the common, although not the universal, rule with the American license taxes. No matter how large the profits, the tax remains the same.

In the case of a monopoly such a tax necessarily falls on the monopoly profits. For the very same reasons that were advanced above, in the discussion of a tax on monopoly net receipts, the tax cannot be shifted. It is always the monopoly revenue that suffers.

In the case of competition, the tax of fixed amount is a condition precedent to production. It might be inferred that the tax would therefore be an addition to the necessary cost of production, which must be shifted to the consumer. But this is not the case; for such a tax is even more inimical to the small producer than a tax on gross product. As the large producer will pay absolutely no more than his small competitor, he will prefer, provided the commodities are reproducible to any extent, to assume the tax and to recoup himself by capturing the customers of the smaller dealer. The minor producer who is thus unable to add the tax to the price will be crowded out of existence. Thus the fixed license tax, when high enough to tempt the large dealer, tends to be borne by the producer — until, indeed, the gradual trend toward monopoly, fostered by the tax, may bring about a rise of price and thus affect the interests of the customer. Here again, however, it would be only indirectly the tax that would cause the rise of price. But it may frequently happen that the price will not rise at all, the increased sales of the fewer producers compensating them for the tax which they pay. In such a case, the incidence of the tax may in a certain sense be declared to be neither on the consumers nor on the producers who continue to produce permanently after the imposition of the tax; for the whole tax may be discounted and borne by the unfortunate producers who are crowded out of existence. Thus the system of high liquor licenses does not necessarily result in any increased price to the consumer. Its effect may be a dimi-

nution of the saloons and the gradual monopolization of the trade in the hands of the wealthier individuals. The producer then always pays this tax; the consumer may or may not be affected ultimately.

When the so-called "license taxes" are not fixed in amount, but vary with gross receipts or gross produce or net profits, their incidence is governed by the rules laid down in the preceding paragraphs. The word "license" covers a multitude of very distinct taxes.

In summing up the preceding discussion, we come to the following conclusions: the incidence of a tax on monopoly revenue is always on the producer, except in the case where the tax is proportioned to the amount produced or sold, in which case the tax is ordinarily shifted in whole or in part, although even there, under certain conditions, the tax may remain on the monopolist producer; a general tax on competitive profits, whether fixed or proportional to net receipts, rests on the producer; a special tax on competitive net receipts is ordinarily shifted to the consumer; and a roundabout tax on competitive profits, in the shape of a tax on gross receipts or gross produce, may or may not be shifted to the consumer — with the probability that, in the great majority of cases, the whole, or almost the whole, of the tax will be so shifted.

This conclusion may not be satisfactory to the sticklers for over-precision or for "natural laws" of incidence. But it will be sufficient to show the delicacy of the problem, and to prove how superficial is the optimistic or general diffusion theory.

If we wish to draw any inferences as to some existing problems in the United States, they may be summarized as follows: —

(1) The so-called "business" taxes are not necessarily any more "direct" taxes than are the national internal revenue taxes.

(2) Taxes on pure monopolies should not be levied on

gross product or on gross receipts if it is desired that they should remain on the monopoly.

(3) Taxes on corporations should be levied on net receipts rather than on gross receipts or on other elements, if it is not intended that the taxes should be shifted to the community.

(4) Business taxes in general, including the so-called license taxes, should be levied according to net receipts.[1] The so-called license taxes, when of fixed amount, further the trend toward monopoly; and when graduated according to sales tend to be shifted to the consumer.

(5) Excise or internal revenue taxes, when levied on gross product, are apt to be shifted to the consumer. But the degree to which they will be shifted depends chiefly on three points: (*a*) whether the business is of a monopolistic or of a competitive nature; (*b*) whether the elasticity of demand is great or small; and (*c*) whether the relation of product to cost is constant or not. There is always a possibility that a portion of the tax may rest on the producer.

The application of the general principles of the taxation of profits to land, houses, debts and mortgages has already been made in preceding chapters, and needs no further discussion.

[1] One of the few inductive studies of the incidence and effects of the tax on corporate profits is that of Dr. Willibald Mildschuh, of the university of Prague, on the Austrian bank tax: "Ueber die Wirkungen der Erwerbsteuer auf die österr. Kreditbanken und Vorschusskassen" in the *Statistische Monatschrift*, 1912, pp. 151–241.

CHAPTER VI

Taxes on Wages

It has been customary, since the time of Adam Smith, to make a distinction between the wages of ordinary labor and what he calls "the recompense of ingenious artists and men of liberal professions." Let us, then, first take up the incidence of a tax on the latter class.

Adam Smith maintained that a tax on such skilled employments would be shifted, because this recompense "necessarily keeps a certain proportion to the emoluments of inferior trades."[1] Unless their recompense increased by the amount of the tax, these professions, "being no longer on a level with other trades, would be so much deserted that they would soon return to that level." On the other hand, John Stuart Mill maintained that all the skilled and privileged employments are taken out of the sphere of competition by a natural or conferred monopoly, and that a tax will always fall on them, because they have no means of relieving themselves at the expense of any other class.[2] Which of these two statements is correct?

It would seem that in the main Mill is right, although his reasons are not entirely above criticism. It is true that the earnings of professionals are in general regulated by custom rather than by competition. For a large class, moreover, the superior earnings must be regarded in the light of what Marshall terms quasi-rents. A great tenor, an eminent surgeon or a famous lawyer, for example, will not receive more for their services, if a tax be imposed on the class to which they belong. To them a tax simply means a burden which cannot

[1] *Cf.* above, p. 145. [2] Mill, *Principles*, book v, chap. iii, § 4.

be shifted. If the tax had not been imposed, their earnings would have been the same. Moreover, the whole class of professional workers is in many respects subject to influences of a more or less uneconomic kind. Their motives are frequently not pecuniary, but rather of a higher nature. An actor, a painter, a doctor, a lawyer, often adopts his profession with other objects in view than simply making his living or obtaining the greatest possible income. It is not long since the recompense to certain professional classes, like doctors, was regarded as a gratuity, not as a legally enforceable due. Even if we regard these classes from the purely economic standpoint, we cannot say that their recompense bears any necessary proportion to common wages. The earnings of the liberal professions are not dependent on cost of production. It is only by a perversion of words and of facts that we can consider the time and efforts spent in educating a member of a profession as a capital which must earn interest. In fact, the present alleged overfilling of the professions is due not so much to the hope of greater earnings as to the compulsory education and general social conditions of modern times. The forces which keep the price of labor in general at a certain level do not operate with equal effect in this field. The price of labor in professional occupations, in short, is not competitive, but is either customary or monopolistic.

Salaried public officials belong to a similar category; for governmental salaries depend primarily on the relative desirability of governmental service, and on considerations of imagined political expediency. They may be highest in countries where the usual level of wages is lowest. Even if this were not so, it would be hard to say on whom a tax on official salaries could be shifted. Surely not on the government, because it does not enter the market as a producer; nor does it follow ordinary commercial principles. If the tax be sufficiently high to render the position undesirable, it may result in less efficient, and therefore in the long run more expensive, work. The community at large will suffer

from a poor civil service. But the tax, as such, cannot be shifted.

When, however, we come to the ordinary wages of the common artisan, whether skilled or unskilled, the matter is not so simple. We have seen that the older theory maintains that a direct tax on wages falls on profits, because wages are necessarily fixed by the cost of living, or the standard of life. But, in the course of our sketch of the history of the doctrine, we learned some of the objections made to this theory. These may be summed up as follows: —

(1) It is assumed that laborers will not consent to accept a reduction in their standard of life. This, however, is largely a question of power between the wage-earner and the employer. It is impossible to say in advance who will win. If wages were actually fixed by the bare minimum of subsistence, then, indeed, a tax on wages would necessarily be shifted. Although Ricardo was not, properly speaking, a believer in the iron law of wages, he makes use of this very argument to prove his point. The fact is that wages are never at this point of bare subsistence: the standard of life is always above this limit. Between this limit and the actual standard of wages there is a margin on which a tax may encroach. An irruption of low-priced immigrants, other things being equal, will inevitably lower the standard of life and the general rate of wages. So also a tax on wages which will, at first at all events, fall on the laborer, may equally well lower his standard of life, by making it impossible for him to procure the conveniences to which he has been accustomed. The wage-earner will, of course, strive to reimburse himself by demanding higher wages; but there is no reason why the employer should be compelled to acquiesce. If that were true, no reduction of wages would ever be possible, because a reduction of wages always implies a lowering of the standard of life. Whether or not a tax on wages will be shifted on profits, even in the long run, depends entirely on the relative strength of the labor organizations and on other

conditions which may compel the employer to pay an increase of wages equivalent to the amount of the tax. Whenever such conditions are not present — and they are frequently absent — the tax will rest on the wage-earner, and trench on the margin above the bare rate of subsistence, thus keeping down the standard of life.

(2) Even granting that a tax on wages may in the long run, under favorable conditions, be shifted to profits, in the interval the burden will be borne by the laborer. It is a well-known fact that in a general rise of prices the price of labor is always the last to respond to the general impulse. This interval, however, may become more or less permanent. The longer the delay, the more severe is the suffering that ensues, and the greater the prospect that the temporary diminution of the consumers' effective demand will be converted into a reduction of the laborers' standard of life.[1]

The taxation of labor results in a vicious circle. The weaker the workman, or the lower his general standard of life, the less able is he to resist the attempts of the employers to reduce his wages to the barest minimum. The higher his wages, the more effective is his power of resistance and compulsion, and the more likely is he to secure a gradual continual advance of wages. The imposition of a tax on wages thus injures the workman both temporarily and permanently. It reduces his standard of life, and, in weakening him, it renders less easy any future attempt to lift himself out of his impoverished condition. If a tax on wages is shifted to profits at all, it is only after a long and fierce struggle, during which the laborer may suffer materially, and as a result of which his whole *morale* may be lowered. Here again there is no place for either optimism or absolutism of theory.

[1] An early discussion of the effects of taxation on wages, which breaks completely with the older doctrine, is Carl T. H. Roesler, *Von dem Einfluss der Besteuerung auf den Arbeitslohn*, Erlangen, 1860. Roesler characterizes some of Ricardo's statements as "monstrous."

CHAPTER VII

Other Taxes

The application of the principles which govern the incidence of taxation to the other taxes that have not yet been treated calls for but little discussion. The most important of the remaining taxes are as follows: —

1. *Poll Taxes*

A poll or capitation tax is clearly not susceptible of being shifted, except to the extent that it falls on the laborer. Even then, it must trench upon the margin between the cost of subsistence and his actual standard of life before the conditions under which the shifting may take place will be present. The possibility of shifting, moreover, as has already been indicated, is not by any means the same thing as the actual shifting itself.

2. *Inheritance Taxes*

A tax on inheritances or bequests cannot be shifted, for evidently there is no one to whom it could be transferred. The ulterior effects of which some writers speak, such as the influence of inheritance taxes on the accumulation of capital, do not really illustrate the process of shifting. They are, moreover, of such doubtful validity that they may be neglected.[1]

[1] Professor Bastable (*Public Finance*, 2d ed., p. 563), for example, bases his criticism on Ricardo's view that such taxes fall on capital, and thinks that the whole society will as a result suffer from less efficient production. For a criticism of this position, see West, *The Inheritance Tax*, 1895, pp. 119–122.

3. *Excises*

Since an excise, or what is termed in America an internal revenue tax, is virtually one form of the profits tax discussed above, the problem as to whether it will be shifted depends for its solution on the consideration of all the complicated points referred to there.[1] In the first place, the tax may be evaded in whole or in part, with a proportionate loss to the treasury.[2] Secondly, in virtue of the process of transformation,[3] the revenue may accrue to the government, but the burden may be felt by no one. Thirdly, if the tax is neither evaded nor transformed, and if, as is likely, there is no room for capitalization, the tax will be apt to be shifted. The extent to which it will be shifted depends, however, as we have seen,[4] primarily on the elasticity of the demand, the possibility of employing substitutes and the ease with which the consumer may be induced to use a slightly inferior article. But it will also be affected by such considerations as the height of the tax, the existence of monopoly, and the ratio of product to cost. To enter into further details would necessitate a repetition of the analysis which has been presented above.[5] Bearing in mind these general principles and qualifications, each particular case must be investigated separately as it arises, since the possible combinations are numberless. To attempt such an investigation here would obviously carry us far beyond the limits of a general study like this.[6]

[1] *Supra*, pp. 339–366. [2] *Supra*, p. 9. [3] *Supra*, pp. 5–8.
[4] *Supra*, p. 342. [5] *Supra*, pp. 343–348.

[6] Inductive studies of the incidence of excises have been made by E. Laspeyres, "Statistische Untersuchungen über den Einfluss einer Steueraufhebung auf die Preise der bisher besteuerten Produkte" in the *Oesterreichische Statistische Monatsschrift*, iii (1877), pp. 495 *et seq.*; G. Schanz, "Zur Frage der Ueberwälzung indirekter Steuern auf Grund des bayrischen Malzaufschlages" in Schmoller's *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirthschaft*, 1882, pp. 563 *et seq.*; Carl Hager, *Die Ueberwälzung der Zuckersteuer und die Prämie der Rübenzuckerindustrie in Deutschland und Frankreich*, Berlin, 1893; and Karl A. Lange, *Die Wirkungen des bayerischen Malzaufschlaggesetzes vom 18. März, 1910 auf . . . die einzelnen Schichten des Wirthschaftslebens*, Stuttgart, 1916. — *Cf.* F. G. Tenerelli, *L' Azione delle Imposte Indirette sui Consumi con particulare Riguardo alla Legislazione Italiana*, Torino, 1898.

The possible ulterior effects of excises have also been adverted to above. In some cases the tax may lead to the use of substitutes, unless these are also taxed; in other cases it may lead to adulteration or to the use of inferior grades. In some cases, by checking consumption it may react unfavorably on the producers and again on the purveyors of the raw materials, and so on, thus spreading its restrictive effects throughout the community. In other cases a tax on one commodity or employment may give a decided impetus to the sale and production of another commodity, which is to be considered a rival rather than a correlated commodity. In some cases, those who do not pay the tax because their consumption is cut off by the rise of price may suffer more than those who continue to purchase the commodity. In other cases the loss in the consumer's surplus may be very easily compensated. To follow to its remote consequences the ultimate effects of an excise would demand such an accurate acquaintance with all the facts of the particular economic situation as to task the possibilities of the most subtle and minute analysis. It may be said, however, that in the majority of cases such a tax tends to be shifted in whole or in greater part.

Much the same may be said of an import duty. As a general rule, this tax will be partially or completely shifted; but the exact result will depend on the particular conditions of the individual case. The application of the general principles of incidence to customs duties is, however, so important as to warrant a somewhat more extended discussion.

4. *Import and Export Duties*

The theory of international value, as it has been successively developed by the classical economists, is nothing but an application, although an exceedingly complicated one, of the general law of value.[1] The elements that enter into

[1] The most successful restatements of the theory by modern authors are to be found in Bastable, *The Theory of International Trade, with Some of its Applications to Economic Policy*, 4th ed., 1903, and Edgeworth, "The Theory of International Values," a series of articles in the *Economic Journal*, iv (1894),

the equation of international demand are so numerous and so complex that an investigation of the actual effects of a tax upon any one class of commodities would require for its proper solution, not only an acquaintance with the details of the theory itself, but also an intimate knowledge of all the forces influencing the supply of, and the demand for, the commodities affected in the two countries immediately concerned, as well as in all the other countries that constitute the world market.[1] Among the considerations influencing the problem of the incidence of a tax on imports or exports, the following are the more important: —

(1) To what extent does the exporting country control the supply of the commodity? (2) To what extent does the importing country constitute the sole market for the commodity? (3) To what extent can the commodity in question be produced at home? (4) What is the ratio of product to cost? (5) To what extent is the demand elastic?

pp. 35–50, 424–443, 606–638. The particular question of the shifting of a tariff tax was treated by Professor Bastable in his "Incidence and Effects of Import and Export Duties," in the *Report of the British Association* for 1889, pp. 440 *et seq.* — Some very refined and subtle mathematical studies as to the incidence of import duties have been made by C. F. Bickerdike, "The Theory of Incipient Taxes," *Economic Journal*, xvi (1906), pp. 529–535, and S. J. Chapman, "A Note on the Incidence of Protective Import Duties," *ibid.*, xix (1909), pp. 133–139 and 305–308. The practical value of such speculations is rather remote. We must bear in mind here, as well as in some of Professor Edgeworth's diagrams, the warning given by Auspitz and Lieben at the close of their mathematical discussion of the incidence of import duties: "Nur bei völliger Stabilität der Preise aller anderen Artikel, sowie der Werthschätzung des Geldes seitens aller in Betracht kommenden Individuen, können wir überhaupt Kurven für irgend einen Artikel aufstellen; von gleichzeitig für mehrere oder gar für alle Artikel geltenden Kurven kann daher nicht die Rede sein." *Untersuchungen über die Theorie des Preises*, 1889, p. 428. — Professor Chapman himself concludes "that no general statement can be made about the incidence of an incipient import duty." *Op. cit.*, p. 308.

[1] As against those who expect a precise answer to every practical problem of the effect of a tariff, the statement of Professor Nicholson seems almost justifiable, that in many cases "the only answer is that an answer is impossible." In another place he says that "the incidence of import and export duties, especially when the indirect effects are considered, is the most complicated and difficult problem in economics." — "Tariffs and International Commerce." By J. S. Nicholson. In the *Scottish Geographical Magazine*, September, 1891.

Let us take up first the questions connected with an import duty. The imposition of the tax may be considered, in ordinary cases, as an addition to the cost of production, and as such increases the price of the article in the importing country by the amount of the duty. Under such conditions it is true that "a tariff is a tax," and that it falls on the consumer. This conclusion is based on the assumption that the producers do not bear any of the tax; that, although the sales necessarily fall off more or less, according as the demand is sensitive or not, by reason of the increased price, the producers find an outlet for their goods in some other country, so as to recompense them for the partial loss of the market in the country which imposes the tax.

This assumption, however, is not always correct. It may happen that the importing country constitutes either the sole market for the commodity, or such an important part of the market that the producer finds it impossible or difficult to extend his sales in other countries. To the extent that this is true, the producer finds it to his interest to avoid any substantial diminution of the demand in his chief market. This can be accomplished, however, only by his consenting to bear a portion of the tax himself. The conditions that are most favorable to the consumer in the importing country are: first, that the importing country constitutes the sole market for the commodity; and, second, that the demand for the commodity is so very elastic that a slight increase of price causes a very great diminution in the sales. But from this very exceptional case, where the producer tends to bear a large share of the tax, down to the ordinary case, where the consumer bears the whole of the tax, there are all kinds of gradations.

The danger of the assumption that the tariff is always a tax is illustrated by an article of Professor Taussig.[1] He estimated that as 6370 million pounds of sugar were consumed in the United States, the total taxes paid by the consumer were 101 million dollars; and since the proceeds of the duty were only

[1] F. W. Taussig, "Sugar: a Lesson on Reciprocity and the Tariff," in the *Atlantic Monthly*, March, 1908.

$52,400,000, he estimated that the remainder, or $48,600,000, was received by the sugar producers. Practical merchants connected with the import of sugar showed, however, in the hearings before the Ways and Means Committee,[1] that such a calculation is egregiously incorrect. For since a portion of the sugar supply comes in free of duty and another portion with a partial remission of duty, the assumption that the price of all sugar is raised by a tax on the import of a part is manifestly erroneous. In a subsequent article,[2] Professor Taussig frankly concedes his mistake, not however in time to prevent its being copied with approval in some text-books.[3]

Another very important element in the problem is the extent to which the home production in the importing country may fill the gap caused by the diminution in the imports from the exporting country. The ordinary reasoning that "a tariff is a tax" is based on the assumption, as we have seen, that the equilibrium will be reached when the decreased supply from the foreign country sells at the increased price. If the home country cannot produce the article at all — that is, if the exporting country has a monopoly of the supply — this assumption is valid. But if the home country has hitherto been prevented from producing the article solely because the price has been too low to admit of profits, the degree to which home production can round out the supply depends entirely on the extent to which the price rises. Suppose that an imported commodity can be produced abroad so as to sell in the importing country at $10.00, while it can be produced in the importing country only at $12.50. If a tax of $2.00 per unit is imposed, other things being assumed as equal, the price will rise to $12.00, and the demand will fall off. But suppose that the importing country can now furnish a part of the supply, and because of the larger output will be able to produce with profit at $11.00. Notwithstanding the tax of $2.00, the price

[1] *Tariff Hearings before the Committee on Ways and Means*, 1908–1909. See especially the testimony of Mr. Atkins, iii, pp. 3345–3383.

[2] *Quarterly Journal of Economics*, xxii (1909), pp. 548–553.

[3] *Cf. e.g.* Ely, *Outlines of Economics*, new ed. 1908, p. 359.

cannot rise above $11.00, the demand will not fall off as much as before, and the tax will be divided between the foreign producer and the home consumer. The extent to which the home producer can capture a part of the market depends, among other things, upon the ratio of product to cost. If the commodity is produced at home under the law of increasing cost, which as we have seen is the usual case in competitive industries, the chance of the home producer is not so good; if under the law of decreasing cost, which as we know implies a trend toward monopoly, his chances are better. But it is obvious that cases may arise where it is not true that "the tariff is a tax" in the sense that the whole burden of an import duty is necessarily borne by the consumer.[1]

The indirect effects of an import duty are interesting, but lie beyond the scope of this inquiry. These effects, if carefully studied, would be seen to influence the foreign as well as the home country. So far as the foreign country is concerned it may be stated that to the extent that the market in question is of importance to the exporting country, the imposition of an import duty will slightly alter the equilibrium, to the disadvantage of the foreign country.[2] This, however, from the point of view of revenue, is clear: that the greater

[1] This is now recognized by the foremost writers on the subject. *Cf.* the quotations in Professor Edgeworth's article in the *Economic Journal*, iv, p. 43, and his own statements, *ibid.*, pp. 46–48. The conclusions to which Professor Carver comes in his article on "The Shifting of Taxes" in the *Yale Review*, v, p. 271, are therefore really not "opposed to the orthodox teachings" on the subject, as he assumes, if by orthodoxy we mean the views commonly held to be authoritative. Professor Plehn in his *Introduction to Public Finance*, fourth edition, 1920, pp. 149–150, gives a list of five rare cases in which a part of the import duties will be shifted to the foreign consumer. Only one of these, however, seems to be entirely sound, viz., case *b*, where a "tax is imposed on goods produced abroad by a large fixed plant for a limited market which would be lost if the prices were raised."

[2] As Professor Pigou puts it in *Protective and Preferential Duties*, 1906, p. 23: "Economists are agreed that a part of the direct burden of import duties is in general shifted permanently on to foreigners. . . . The tax will have altered the rate of interchange in our favour, and so compelled the generality of foreign consumers to offer a little more than before of their products in exchange for a given quantity of ours."

the supply that is captured by the home producer, the less will be the proceeds of the tax. If the foreign producer is entirely shut out, the revenue will be zero. The amount of the immediate loss to the community in general will thus depend on the price at which the home producer can afford to sell. If, in the extreme case mentioned, the home producer supplies the entire market at a price of $12.00, the government loses its whole revenue from the tax, and the consumers lose the entire amount of the tax through the increase of price. If, on the other hand, the price of the home product after the shutting out of foreign competition and the development of improved processes at home can be finally brought down to a point lower than $10.00, the revenue will indeed still be zero, but the consumers will lose nothing, and the community will have gained the advantages resulting from an increase of industry. This, however, brings us at once to the controversy between free trade and protection — a controversy that can be settled only by considering the wider and more permanent results of an international industrial policy. What concern us here are the immediate results, or the actual incidence of an import duty.

In the case of an export duty, much the same conclusions can be reached. An export duty ordinarily falls on the citizen of the exporting country. But if the duty is imposed on a commodity of which the country has a monopoly, and still more if the demand for this monopolized commodity is comparatively persistent, it may happen that an export tax will be shifted to the foreign consumer. It is noteworthy that the chief examples of export duties still to be found are those of duties on articles which approach the conditions of monopoly supply. Such are, for example, the export duties on opium in India and on guano in Peru. But it is to be observed that the cases of perfectly stable demand, even for a monopolized article, are exceedingly rare.[1] There is scarcely any commodity for which some substitute, even though it be incomplete, cannot be found. To the extent that this is true,

[1] See above, pp. 229–231.

more and more of the export duty will be borne by the monopolist exporter for fear that the decrease of sales, even at a higher price, will lower his maximum monopoly revenue.

5. *Stamp Taxes*

Stamp taxes are usually supposed to be shifted to the consumer or purchaser. This does not, however, necessarily follow. If the stamp taxes are imposed on the sale of particular commodities — as for instance, the American internal revenue duty on proprietary medicines — we are confronted by what is an ordinary form of the taxation of profits discussed above. This is equally true when the so-called stamp taxes are nothing but taxes on production, levied by means of a stamp, as in the American taxes on tobacco, whiskey and beer. Stamp taxes here do not really form a distinct kind of taxes.

If the stamp taxes are, however, taxes on transportation and communication,[1] much again will depend on the height of the tax, the character of the business and the elasticity of the demand. For instance, in the case of the American war-revenue taxes of 1898, the one cent tax on telegraph messages as well as express receipts was shifted to the consumer, partly because the tax was high enough, from the standpoint of the telegraph and express companies, to warrant an attempt to throw it on the sender of the message or parcel, and partly because the tax was at the same time so low that the consumer did not care to abandon the use of those particular media of communication and transportation. The telegraph is used in America almost exclusively for purposes of business; and the service may to a large extent be classed as a necessary, with comparative inelasticity of demand. The express companies, moreover, even in that part of their trans-

[1] The only detailed investigation of such a tax is the excellent study made by Professor Jannacone of the Italian tax on emigrants, and incidentally of the American head tax of four dollars apiece on immigrants. *L' Imposta sul Trasporto degli Emigrante e la sua Incidenza.* Par Pasquale Jannacone. N.d. (1907), 96 pp.

actions where they come into competition with the postal service, did not run much risk of reducing their business by adding the tax to the price.

On the other hand, the one cent tax on parlor car tickets was borne by the transportation companies, partly because of their fear of losing patronage, partly because the tax constituted a less important percentage of the price than was true in the preceding cases. From the consumer's standpoint, in the case of a moderate comfort like the parlor car service, even a slight addition to price may mean a considerable diminution of demand for the service. From the producer's standpoint, one cent on a sum ranging from two to four dollars (the average price of a parlor car ticket) is of considerably less consequence than one cent on a sum ranging from twenty-five to forty cents (the average price of a telegraph message or express shipment). Even here, however, it was for a time open to question whether the conditions of comparative elasticity of demand and supply would not change to such an extent as to cause the tax on parlor car tickets to be shifted to the consumer, just as the ordinary tax on railroad tickets in the continental countries of Europe is also borne by the passenger.[1]

Finally, when a substantial tax is imposed on an act of communication or of transportation, where the demand is sensitive, the tax may, in rare instances, seem to have the very exceptional result of lowering prices. When the United States, for instance, imposed, in 1898, a one cent tax on ordinary fifteen cent telephone messages, the telephone companies were so apprehensive of diminishing their maximum

[1] Professor Jannacone, while not denying these facts, thinks (*op. cit.*, p. 18) that the above solution is "too simple." It must, however, be borne in mind that the above illustration was designed to call attention primarily to the important considerations. To go into the minutiæ of the question with reference to rival and correlated portions of the business, or to consider the problems of monopoly or competition, or any other of the points adverted to in the earlier sections of this volume, would simply involve ourselves in repetition. Professor Jannacone, moreover, in his own analysis of the immigrant tax, properly lays the chief stress on the question of elasticity of demand.

monopoly revenue, that they not only decided to refrain from adding the tax to the price, but also resolved to evade the tax entirely by reducing telephone messages to a price below fifteen cents. Ordinarily, however, a monopoly like the telephone company would be presumed to have realized its maximum advantage at the price current before the imposition of the tax. The tax may, indeed, in this particular case, have led the company to consider the whole matter anew; but, after all, the reduction of the price would have ultimately come about, tax or no tax. The tax, therefore, was the occasion, rather than the cause, of lower prices.

When the stamp taxes are taxes on acts or transactions, the incidence will depend on whether these transactions are of a commercial character. In the case of judicial taxes, sometimes termed court costs and fees, there is evidently no one to whom the taxpayer can shift the burden. In the case of ordinary commercial transactions, the important considerations, again, will be the height of the tax and the elasticity of the demand. When the tax is very insignificant, as in the case of a tax on the ordinary receipts of sales, the merchant is very apt to bear the tax himself. When the tax is sufficiently large to make it an inducement to the seller to shift the burden, the tax, if imposed on him, will usually be shifted to the buyer, except to the extent that this shifting may diminish the number of transactions and thus induce the seller to bear a part of the burden himself. In such cases, the burden is apt to be divided in accordance with the relative elasticity of demand and supply. The net result may then be a diminution of transactions.

This leads us to an important consideration, the force of which has frequently been overlooked. Where the net result of a tax on transactions is a decrease in the transactions, the real burden may be regarded as falling on neither the seller nor the purchaser.[1] It is an instance of the effects of

[1] This is overlooked by Pierre Bergeron de Charron, *De l'Assiette et de l'Incidence de l'Impôt d'Enregistrement*, 1898, Troisième Partie, chap. i, who takes the ordinary and superficial view of the subject.

a tax being injurious to those who do not pay it, rather than to those who pay. In so far as the parties to the transaction are concerned, the result of the decrease of sales of real estate, for instance, is to lower the selling value of the land. For any impediment to the free transfer of a commodity is bound to diminish its relative desirability or value. The purchaser indeed pays the tax, but he will recoup himself by paying so much less for the land. Were there no tax, he would be willing to pay a larger price. The result hence is that the tax is capitalized or amortised into a lower selling price of the land, and it is only the original owner, who possesses the land before the tax is imposed or increased, who suffers. After the tax has been in existence long enough for the original owner to part with his land, the new owner as a consequence of the absorption of the tax will not suffer.[1]

This kind of capitalization or amortisation, however, differs from the ordinary phenomenon discussed above.[2] For ordinarily capitalization depends on the regular recurrence of a tax, and can be ascertained by the simple arithmetical process of capitalizing the difference between the present and the future income. In the case, however, of taxes or the transfer of real estate, while the tax indeed recurs, the recurrence is at irregular intervals, and the depreciation consists in the capitalization of an unknown quantity. This very

[1] Dr. Leo Petritsch, *Zur Lehre von der Ueberwälzung der Steuern mit besonderer Beziehung auf den Börsenverkehr*, 1903, chap. i, clearly perceives this. His whole discussion is noteworthy. — Some writers, like Leroy-Beaulieu, *Traité de la Science des Finances*, 7th ed., 1906, i, p. 631, recognize the fact that these taxes on land transfer diminish the value of the land, but they erroneously think that each time the land is sold its price will fall. "Ces droits constituent une véritable confiscation d'une partie notable du capital que represente l'immeuble. Il faut épargner trois on quatre ans le produit d'une propriété pour recouvrer la somme payée au fisc à titre de droit de mutation. . . . Des droits de mutation si elévés déprécient la valeur du sol dans les mains de tous les détenteurs, ils nuisent autant à l'acheteur qu'au vendeur. L'un et l'autre se trouvent après l'acte dans une condition plus mauvaise qu'auparavant, au moins à un certain point de vue.' Yet, as Petritsch pointed out some years before (*op. cit.*, p. 20), the value of the land falls, not because of the tax as such, but because of the lesser frequency of the sales.

[2] *Supra*, pp. 221–226.

uncertainty contributes to render real estate values unstable, and in itself would suffice to explain the absence in France of such an important class of operators as the "real estate interests" in large American cities.

The same considerations which have just been mentioned apply, with some modifications, to the taxes on stock- and produce-exchange transactions. The process, however, is even more subtle and complicated.

The ordinary view of such taxes is that they are borne by the respective parties in interest — the buyers and sellers of securities or the speculators on the bull or the bear side in produce, so that the tax may really be considered as a tax on speculation, or on the unearned or fortuitous profit of the speculator. A tax on stock- and produce-exchange transactions would thus be a tax on speculative profits.

In reality, however, it is nothing of the kind. The results are quite different.

The real function of speculation, as has been abundantly shown by modern economists,[1] and as has recently been explained in detail in the admirable report of the special commission on the exchanges appointed by Governor Hughes of New York,[2] is to afford a continuous open market for the transactions, and thus to diminish the fluctuations of price. Any attempt to restrict legitimate trading is bound to interfere with this steadying influence. Thus the famous prohibition of speculation in gold during the Civil War in the United States resulted in immensely increased oscillations of price, which continued until the hasty repeal of the law; and the recent German legislation against futures in the wheat market produced an effect the contrary of what was anticipated, leading, after the lapse of a decade, to an alteration in the law.[3] A tax on produce-exchange transactions would tend to have

[1] *Cf. e.g.* Seligman, *Principles of Economics*, 4th ed., 1909, pp. 356–366.

[2] *Report of the New York Commission on the Stock and Produce Exchanges*, New York, 1909.

[3] *Cf.* Emery, "The German Exchange Act," in *Political Science Quarterly*, x (1895) and xiii (1898).

the same kind of effect as an absolute prohibition, although its efficacy would obviously be far less. In other words, a tax would tend to diminish the number of transactions or to restrict the market. To this extent it would lead to an increase in oscillations of price. But the tax, although paid by the broker, would be charged to the principal, whether seller or purchaser, and would not be borne by this principal; for as long as he continued to speculate, the gains on the larger margins of the fewer transactions would presumably equal the fewer gains on the smaller margins of the more frequent transactions. The real burden would be borne, not by the speculators, but by the producers or the consumers of the commodity traded in on the produce exchange. For the advantages of the relative stability of price due to produce speculation inure, as is well recognized, either to the producer or to the consumer, or to both. The tax on produce-exchange transactions tends, therefore, to engender consequences which are not usually expected.[1] Where, indeed, as is commonly the case, the tax is relatively slight, these consequences are almost imperceptible. But at all events the tax must not be regarded as one on speculators' profits.

In the case of stock-exchange taxes, the situation is still more complicated by the fact that we are not dealing so directly with producers and consumers of a taxable commodity. The tax is imposed on the transfer of securities, not of ordinarily consumable commodities. Here, again, it may be stated that the tax is not, as usually imagined, borne either by the brokers or by their immediate principals who are trading on margins. For here, as on the produce exchanges, any hindrance to the free speculative movement tends to increase the fluctuation of prices, and with this widening of the upper and lower limits of stock quotations even the so-called traders or room brokers in New York, who virtually speculate on their own account, will tend, notwithstanding the diminution in transactions, to make as high profits as before. The

[1] *Cf.* Petritsch, *op. cit.*, chap. 2.

real burden here falls, not on the parties to the transactions, but on certain outsiders.

Who are these outsiders? In the first place, they are apt to be the smaller capitalists, who have borrowed on securities, and who are less able to endure the losses resulting from excessive declines in value than are their larger brethren. In the second place, since the tax increases *pro tanto* the expense of transferring securities and thus diminishes the mobility of capital, it is likely to increase, even though slightly, the rate of interest. If, however, the rate of interest rises, the capital value of the securities will decline. We would thus have a kind of capitalization of taxation somewhat comparable, although not in degree, to the capitalization brought about by a tax on the securities themselves.[2] If, however, instead of dealing with a new or suddenly increased tax on stock-exchange transfers, we have to do with a long and well established tax, the net result will obviously be that when the securities are initially listed on the exchange they will fetch a price somewhat lower than would be the case were there no tax on the stock-exchange transaction. The real losers, therefore, will be the bankers who float the securities; or, still more likely, the corporation or enterprise which has arranged with the promoters to underwrite the issue. The ultimate result will be a slight falling off in the profits of the stockholders in the industrial and other enterprises whose securities are listed on the exchanges; and to the extent that the issues consist of government bonds, a slight increase in the public expenditures, which is, of course, far more than compensated by the proceeds of the tax, when the same government that issues the securities also imposes the tax. Thus here again we see that the consequences of a tax are frequently quite different from those that are expected or intended.

6. *Income Taxes*

The incidence of an income tax has been much discussed. One writer has even attempted to prove that an equal tax on

[1] Petritsch, *op. cit.*, p. 68. [2] *Cf. supra*, p. 222.

incomes is the only tax that cannot be shifted.[1] He draws the conclusion that the income tax must therefore be the ideal — the only possible realization of the principle of equality of taxation. This contention, however, is open to criticism for two reasons. In the first place, we have seen that there are many other taxes which cannot be shifted — like the poll tax, taxes on inheritances, on rent, on salaries, and certain taxes on monopolies. Secondly, and more important, it is untrue that the income tax, as frequently levied, cannot be shifted.

In some countries, as in England, the income tax is simply a combination of taxes on the separate ingredients of income, and it often happens that the so-called income tax is, in reality, a system of taxes on gross revenue or gross receipts. In such cases there can be no question that each part of the income tax follows the law of incidence of the respective separate taxes, so that there is, in respect of incidence, practically no difference between a so-called income tax and the other direct taxes of which the income tax is substantially composed. If the total income is composed of wages, the law of incidence cannot be different, whether we call the share income or wages. If the total income is composed of profits in the broad sense, the tax will be shifted or not, according to the rules of incidence that govern a tax on profits. If the income is derived from house rents, the final burden will be borne in accordance with the principles laid down in discussing the tax on real estate. If some of the separate parts are shifted, the whole cannot possibly remain unshifted.

In those cases, indeed, where the tax is levied on pure income in the strict economic sense, the tax is substantially a tax on economic rent, plus a tax on net profits, plus a tax on wages. Now, the tax on economic rent and on net profits cannot be shifted; and, therefore, as regards all members of the community except the wage-earners, a tax levied on pure income tends to stay where it is imposed. So far as the lowest incomes are exempted from the tax, the tendency would also

[1] Kaizl, *Die Lehre von der Ueberwälzung der Steuern*, pp. 101–118.

be for the income tax on the laborers to stay where it is put. But, even in such cases, there is no absolute certainty that the income tax will not be shifted. In actual life, of course, as we very rarely find either a pure income tax or an equal income tax, we cannot safely rely on the complete non-transferability of the tax. Nevertheless, to the extent that the tax may be considered one on surplus, rather than on margin, the chances are that the tax will remain where it is originally placed.

This entire question, however, like that of the incidence of stamp duties and taxes on exchange, as well as the wider problem of the shifting of all taxes from the consumer onward, practically resolves itself into the old problem whether a tax is to be regarded as a cost of production or an outlay for consumption.

In all the cases that we have thus far discussed we have traced the shifting of taxes down to the consumer. Certain taxes, we have found, are never shifted; other taxes are sometimes shifted in whole or in part to the consumer. But will not the consumer in turn shift the burden to some one else? Here we must remember the theory of Canard, Thiers and Stein, that every tax is shifted on everybody — that every consumer will again shift the tax on a third party, and that this third party who is again a consumer will shift it to some one else and so on *ad infinitum*. Since every one is a consumer, every one will thus bear a portion of the taxes that everybody else pays.

The error of this doctrine lies in the failure to distinguish between productive and unproductive consumption. If every taxpayer were engaged in production and paid taxes only on what he employed for the purposes of further production, there might be some truth in the foregoing doctrine. Many taxes fall on individuals who are not producers at all, so that there is no question of any shifting to the consumer, while each consumer uses only a part of the commodities consumed by him for productive purposes. Every one consumes unproductively. Whatever an individual spends on

luxuries, or on anything but necessaries, is an expenditure which, so far as he is concerned, does not give rise to any further relations of producer and consumer. If the consumer, on whom a certain tax has been shifted, spends his income in buying diamonds, on whom can he possibly shift the tax? Not on the diamond dealer, because he does not stand in any relation of producer to the dealer. He may indeed buy fewer diamonds than he would have bought if the tax had not been imposed, but he cannot shift the tax. The shifting of the tax is not the same thing as the result of the tax. What is true of the diamond purchaser is true of all who consume for purposes other than those of production. So that there is no indefinite diffusion of taxes.

Only so far as the individual purchases or consumes a commodity in order to produce other commodities with it, will the condition arise under which he as producer will be able to shift the tax proper on to another consumer. Here, again, the possible conditions are not necessarily the actual facts. Just as only some producers — and even they only under certain circumstances — will be able to shift the tax, so only some of the consumers (who must in this respect be regarded as producers) — and they only in part — will be able to shift the tax. Hence the theory of the general diffusion of taxation is untenable, whether the theory asserts that all taxes are equally spread throughout the community, or that they will inevitably rest at last on some one class.

CHAPTER VIII

Conclusion

We come now to the close of our investigation, and to the consideration of the question whether the theory of incidence contains by inference any advice for the statesman engaged in framing a scheme of taxation. What is the practical result of our discussion? What weight should be attached to theories of incidence in constructing a positive system of public contributions?

In the first place, we have seen that there is no room for optimism of theory. The legislator cannot rightfully shut his ears to any cry for reform, on the plea that all old taxes tend to become good taxes. Nor dare he complacently grasp any new source of revenue, on the assumption that all taxes, no matter how levied, will ultimately be borne by the community at large. The theory that "all taxes fall on everybody" and are therefore just, is incorrect because it assumes that all taxes are a part of the cost of production. This assumption is untrue, because some taxes are levied on persons, or property, or revenue, where there is no further relation of producer and consumer. Even if all taxes were to be regarded as additions to the cost of production, it would not follow that the taxes would be shifted to the consumers in any definite proportion to their faculty or ability to pay, which is the only test of justice in taxation. If all taxes did really fall on everybody, taxation would be proportional to expenditure; and expenditure is, of all bases of taxation, the least equitable. Thus the optimistic theory must be discarded: first, because the general diffusion doctrine is untrue; and, second, because if it were true, it would cause

injustice. The legislator cannot shirk his duty in this easy-going way.

On the other hand, there is no good reason for pessimism or agnosticism. Some writers, as we know, claim that it is useless to construct any system of taxation, because it is impossible to foresee the ultimate consequences of any tax. But this hopeless attitude we have found to be mistaken. It is true, indeed, that the distinction between direct and indirect taxes is robbed of much of its value; for many of the so-called direct taxes may be shifted in the same way as the so-called indirect taxes. In common parlance the distinction between direct and indirect taxes is practically relegated to the mind of the legislator: what he wishes to have borne by the original taxpayer is called a direct tax, what he intends to have borne by some one else than the original taxpayer is called indirect. Unfortunately the intention of the legislator is not identical with the actual result. We must, then, either revise our nomenclature or declare the present distinction of little value.

While the mere fact that a tax is called a direct tax does not show that it may not be shifted, the preceding discussion has shown that certain general tendencies may be clearly defined. What are these general tendencies of incidence? They may be summed up under the following heads:

In the first place all taxable objects may be looked at from the standpoint of property or from that of revenue. Regarded from the former point of view, we have found that unequal or partial taxes on revenue-yielding property tend to be a charge neither on the community nor on the future possessors, but only on the holders at the time the tax is imposed. The capitalization theory comes into play whenever a new tax is assessed on certain classes of property or the rate of an existing tax is altered. The tax is never shifted onward, but its results are serious, whether for good or for evil, to the class of initial owners alone. The longer the tax lasts, the greater will be the number of new purchases of the class of property in question; so that, after a time, the

existing owners will have bought, or entered on the possession of, the property virtually free from all burden. The tax has been discounted in the purchase price; it is completely absorbed, so to speak, in the capital value of the commodity.

Secondly, and this is especially important in the United States, if a system of taxation consists of a tax on property, it is not necessary to tax every item of property in order to secure an equitable system of taxation. This is due to the twofold processes of absorption and of diffusion of taxation. We have seen that in many cases a tax on a particular class of property will be shifted forward and reshifted until its final effects are diffused throughout the community. This is particularly true of taxes on certain commodities, under special conditions, and of taxes on certain classes of property, like mortgages. The upholders of the old diffusion theory were correct in their analysis so far as they went; their weakness consisted in the fact that they went too far, and that they applied to taxes in general what is true only of certain taxes, and that, too, only under certain conditions. There is, as we have seen, no such thing as a general diffusion of all taxation; but there is assuredly such a thing as the diffusion of some taxes under certain conditions.

When a property tax is imposed on the constituent classes of property in such a way that, as is always the fact, it falls unequally on the different classes of property, it will be diffused in certain cases, and will naturally not be diffused in other cases. If, however, it is not diffused, that is if it rests on the property owner so as to impose on him a burden which is not shared by the owners of other classes of property, we are at once confronted by the process of capitalization or absorption mentioned in the last paragraph. We know, however, that if a tax is capitalized, it will not ultimately fall on the new owner or purchaser of the commodity, but will be absorbed into the selling price. We therefore arrive at this most significant conclusion. Where individual items or classes of property are taxed in such a way that they are not all actually assessed at the same rate, the tax will be either

diffused or absorbed. This joint process of diffusion and absorption of taxation results in what may be termed the elision or final disappearance of taxation. The tax is elided, or disappears as a burden upon the tax payer. Thus if a special tax is imposed on real estate, the tax on houses may be shifted to the tenant and ultimately diffused to the community; while the tax on land may rest on the landowner and be absorbed into the lower purchase price paid by the new owner.

The practical consequence of the elision theory of taxation is that it is unnecessary, in order to secure justice in taxation, that every individual item of property be taxed. Within each class of property holders, every one, indeed, should be assessed; but as between classes of property, economic forces will bring about a readjustment. The process is often a painful one, and in order to injure the present owners as little as possible, great care must be observed in altering existing methods. But the ideal of imposing taxes on property rather than upon individual property owners, must be constantly kept in mind. The attempt in the United States to assess every person upon all his property creates gross injustice, because by our hit-or-miss system some individuals in a given class are assessed and some escape. Those that escape are generally the wealthy; those that are reached are for the most part the ones who cannot afford to pay. The general property tax thus practically results in a travesty of justice. When we abandon the impracticable attempt to tax all property owners alike, and when, realizing that taxation, like value, is a social phenomenon, we learn to tax some kinds of property rather than all kinds of individuals, we shall have made a great stride forward in practical as well as theoretical justice. It is a process which is now slowly going on in the more advanced industrial communities of America. But few realize that the tendency is a corroboration of the theory that the diffusion and the absorption of taxation result in the elision of taxation.

In modern life, however, property taxes by no means exhaust the categories of taxation. On the contrary, in most

countries except in the United States, the tendency is to impose taxes on classes of income rather than on classes of property. Since income is derived from other sources as well as from property, the problems are somewhat different, and present the following considerations: —

In the first place, if we look at taxable objects from the standpoint of revenue, we have found that there are only two kinds of revenue on which a tax, when once imposed, necessarily remains. These are the pure differential rent of the older economists and pure profits, or, to use a term which has sometimes been adopted to include both elements, economic surplus. A tax on surplus can never be shifted, because surplus is not a part of cost of production, but the result of process of production. Thus, taxes on inheritance, gifts, gains from speculation, etc., cannot be shifted, because they are a part of surplus, of pure profits. If it were possible, then, to find a class whose revenue consisted exclusively of economic rent and pure profits, the legislator might single out this class either for taxation or for exemption, according as it was the general policy to have taxes paid directly or indirectly. As a matter of fact, however, such a class does not exist.[1]

[1] The distinction made between taxes on costs and on surplus has recently been elaborated by J. A. Hobson, *Taxation in the New State* (1919). He defines costs, however, somewhat differently as "those elements of income which are necessary payments to owners of productive agents, in order to sustain the productive efficiency of an agent and to evoke its application" (p. 41). This would include "standard wages," "such salaries, fees and profits as are necessary to secure the supply of the requisite amounts of business and professional ability needed for the initiation, organization and management of productive enterprise," and "the minimum interest required to evoke the amount of saving and the application of new capital needed to furnish the plant, tools and materials for the productive processes." On the other hand, "surplus" includes "all economic rents of land," "all interest, profits and other payments for the use of capital, brains or labor which are due to superior economic opportunities and are not necessary incentives to secure such use." Taxes on costs are shifted; taxes on surplus are non-shiftable.

Inasmuch, however, as Mr. Hobson concedes that there is no way of directly ascertaining such elements of surplus in the existing shares of distribution, it is difficult to see what light his analysis sheds on the general problem of incidence. Even as a plan of practical tax reform his suggestion is not much better. De-

In the second place, all remaining taxes tend, in the abstract, to be shifted, until they fall ultimately on the surplus, because all other taxes tend to form a part of cost of production. The conclusion might, therefore, be drawn that taxes should be levied either on net profits alone or on commodities — in the latter case, falling in the long run on profits, but without the knowledge of the profit-receiver. In either case, taxes on wages would be regarded as part of the cost of production, and would be shifted from wages to profits.

Such conclusions rest on doctrines very like those that we discussed under the head of "absolute theories." They tend to be true only in an isolated community where there is complete mobility of labor and capital, and where the economic man reigns supreme. In actual life, these tendencies are met by the counter-tendencies of "economic friction." Taxes on land often tend to stay where they are put, because of international relations and the lack of absolute transferability of capital; taxes on wages, if cunningly imposed, may lead to a lowering, instead of to a heightening, of the standard of life; taxes on occupiers of houses are not necessarily shifted to the owners; and so on.

Thirdly, above all, we must distinguish between kinds of revenue and classes of society. Economic surplus may mean the entire revenue of some individuals, but only part of the revenue of others. As we have already pointed out, the mere fact that a tax may be shifted by a class does not show that the tax may not press very unequally upon individual members of the class. If we thus change the point of view from social classes to individuals, we see how untenable is the

spairing of any taxation exactly proportioned to surplus, he accepts a general progressive income tax with the addition of an inheritance tax. But, as J. C. Stamp points out in "The Special Taxation of Business Profits," *The Economic Journal*, xxix (1919), 419–423, there is no assurance that "surplus" will or can be successfully reached by a progressive income tax. Mr. Stamp's own suggestion that the American excess-profits tax comes nearer than any other to "reach the profit surplus, which is the bulk of all surplus" will scarcely be accepted by those who are acquainted with the practical shortcomings of the tax as actually administered.

argument that the best tax is an indirect tax, because it will ultimately be shifted to the economic surplus of society. For such a tax can get to economic surplus only through the productive consumption of individuals — that is, through expenditures which again create relations of producer and consumer. But as we have just pointed out, not all consumption is productive consumption; and expenditure in general is the least equitable basis of taxation, because it always bears with greater weight upon the less fortunate or more deserving members of any social class.

The advice, therefore, which the correct theory of incidence has to offer to the legislator is: Choose primarily those taxes the results of which can be foretold with some degree of accuracy; at all events, take some taxes where the chances of shifting are very slight, and take, on the other hand, taxes which will be shifted in their entirety. In the former class are included certain taxes on monopolies, net profits, inheritances and definite forms of property and income. In the latter class are included taxes on commodities in the shape of import duties, certain excise taxes and licenses, and taxes on gross receipts of corporations. If the legislator desires to reach certain classes of society directly, let him choose the first kind of taxes; if he desires to have his taxes paid unawares, let him choose the second. If neither the one nor the other kind of taxes suffices for the public revenue, the legislator will be compelled, as is often the case, to resort to taxes the incidence of which is more uncertain and where the intentions of the legislator may be entirely frustrated by the actual course of events.

The theory of incidence has therefore important, but by no means final, advice to offer in the elaboration of a tax system. It does not by any means render unnecessary the study of the principles of justice and equality in taxation. If neither the optimistic, nor the pessimistic, nor the agnostic theory of incidence can be any longer upheld, the student of public finance must seek to elaborate the rules of equitable taxation without any reliance upon the automatic operation

of presumed absolute laws. He must endeavor to make a choice of public revenues which in themselves satisfy the requirement of the principles of economic justice; and in so doing he may be guided by those principles of incidence, but only by those, which are definite and well ascertained. The theory of shifting of taxation is, therefore, an aid to, but not a substitute for, the study of economic justice. As has been well said, the doctrine of incidence is neither the archangel nor the archfiend of the science of finance.

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Nickolls, Sir John. [Really Dangeul, Marquis de Plumart.] *Remarks on the Advantages and Disadvantages of France and of Great Britain*

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Petty, Sir William. *Political Arithmetick.* London, 1690.

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Quid, Oliver. *A Letter of Advice addressed to all Merchants, Manufacturers and Traders of every denomination in Great Britain concerning the odious and alarming Tax on Receipts, in which the oppressive Partiality*

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Quid, Oliver. *A Second Letter of Advice*, etc. London, 1783.

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Roberts, Lewes. *The Treasure of Traffike, or a Discourse of Forraigne Trade. Wherein is shewed the benefit and commoditie arising to a Common-Wealth or Kingdome, by the skilful Merchant, and by a well-ordered Commerce and Regular Traffike.* London, 1641.

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Temple, Sir William. *Observations upon the United Provinces of the Netherlands.* London, 1673.

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Vauban, Maréchal. *Projet d'une Dîme Royale.* Paris, 1707.

Vauban, Marshal. *An Essay for a General Tax, or a Project for a Royal Tythe.* London, 1709.

Verri, Pietro. *Meditazione sulla Economia Politica.* Milan, 1771.

Wagstaffe, William. See *The State and Condition*, etc., 1714.

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Waterhouse, William. *One Tale is good, until another is told, or, Some sober Reflections upon the Act for Chimney Money. Drawn up for the Use of some Neighbors, and thought usefull to be communicated to the good people of this Nation.* London, 1662.

Winer, Robert. D.D. *The Origin and Essence of a general Excise. A Sermon preached on a very Extraordinary occasion at a noted Chapel in Westminster.* London, 1732.

Wood, William. See *A Letter to a Member of Parliament*, etc., 1717.

Wood, William. *A Survey of Trade in Four Parts . . . together with Considerations on our Money and Bullion.* London, 1718.

Young, Arthur. See *The Farmer's Letters*, etc., 1767.

Young, Arthur. See *The Expediency of a Free Exportation*, etc., 1770.

Young, Arthur. *Political Arithmetic containing Observations on the Present State of Great Britain; and the Principles of her Policy in the Encouragement of Agriculture, etc.* London, 1774.

B. Anonymous Works

(Arranged Chronologically)

Restauranda: or the Necessity of Publick Repairs, by setling of a certain and Royal yearly Revenue for the King. [By Fabian Philips.] London, 1662.

England's Wants or several Proposals probably Beneficial for England, humbly offered to the Consideration of all good Patriots in both Houses of Parliament. By a true Lover of his Country. [Edward Chamberlayne.] London, 1667.

England's Interest Asserted in the Improvement of its Native Commodities; and more especially the Manufacture of Wool. By a true Lover of his Majesty and Native Country. London, 1669.

A familiar Discourse between George, a true-hearted English Gentleman, and Hans, a Dutch Merchant: Concerning the present affairs of England. London, 1672.

The Grand Concern of England explained; in several Proposals offered to the Consideration of the Parliament. By a Lover of his Countrey and Well-wisher to the Prosperity both of the King and Kingdoms. London, 1673.

A Discourse on the Rise and Power of Parliaments, of Laws, of Courts of Judicature, of Liberty, Property, and Religion, of Taxes, Trade and of the Interest of England in Reference to France. In a Letter from a Gentleman in the Country to a Member of Parliament. [By Thomas Sheridan.] London, 1677. [Reprinted as a separate volume in *Some Revelations in Irish History, or Old Elements of Creed and Class Conciliation in Ireland.* Edited by Saxe Bannister. London, 1870.]

Reasons for a Limited Exportation of Wooll. London, 1677.

Britannia Languens, or a Discourse of Trade: shewing the Grounds and Reasons of the Increase and Decay of Land-Rents, National Wealth and Strength, etc., etc. London, 1680.

The Groans of the Plantations: or, a true Account of their Grievous and Extreme Sufferings by the Heavy Impositions upon Sugar, and other Hardships, etc. London, 1689. Reprinted in 1698.

A Discourse about Trade, wherein the Reduction of Interest of Money to 4 *per Centum is Recommended,* etc. Never before Printed. [By Josiah Child.] London, 1690. 2d ed., 1693, as well as subsequent editions, entitled *A New Discourse of Trade.*

Taxes no Charge: in a Letter from a Gentleman, to a Person of Quality. Shewing the Nature, Use, and Benefit of Taxes in this Kingdom; and compared with the Impositions of Foreign States. London, 1690.

A Letter from a Gentleman in the Country to his Friend in the City: touching

Sir William Petty's Posthumous Treatise; entituled Verbum Sapienti, etc. [By Sir Thomas Culpeper.] London, 1691.

A Plain and Easie Way for the Speedy Raising of Money to supply their Majesties Present Occasions: which will also, very much tend to the Advancing the Value of Lands. By a Divine of the Church of England. London, 1691.

A Proposal for an Equal Land-Tax, humbly submitted to Consideration. London, 1691.

An Essay upon Taxes, calculated for the Present Juncture of Affairs in England. [By Sir William Temple.] London, 1693.

An Essay upon Ways and Means of supplying the War. [By Charles Davenant.] London, 1695.

To the Honourable the Knights, Citizens and Burgesses of the House of Commons in Parliament assembled. Proposals most humbly offered for Raising (in all Likelyhood) upwards of Five Millions of Money, without Charging the Poor, or Burthening the Rich, by such Ways and Means, that (for the greatest part thereof) the Payers will voluntarily Tax themselves. [By J. M.] London, 1696.

An Essay upon Projects. [By Daniel De Foe.] London, 1697.

Discourses on the Publick Revenues and of the Trade of England. [By Charles Davenant.] London, 1698.

An Essay upon the Probable Means of making a People Gainers in the Ballance of Trade. By the author of the *Essay on Ways and Means.* [Charles Davenant.] London, 1699.

The Mischief of the Five Shillings Tax upon Coal, is Here humbly Represented, That this Tax is Inconsistent with the Safety of England, Partial upon the Poor, Pernicious to our Shipping, and Seamen, Destructive of our River-Men, viz. Boat-Men, Keel-Men, Barge-Men, Ballast-Men, Coal-heavers, &c. Fatal to our Manufactures made with Sea-Coal; especially Salt, Glass, and all sorts of Gross Ironwork; (that by this Tax must be Run into the Coal Countries, or out of the Kingdom,) and highly Injurious to His Majesties Revenue. London, 1699.

An Essay concerning the Necessity of Equal Taxes; and the Dangerous Consequences of the Encouragement given to Usury among us of late Years. With some Proposals to promote the Former and give a check to the Latter. By the author of *The History of the Last Parliament.* [Probably James Drake.] London, 1702. [This work appeared with the same title again in 1704.]

A Short View of our present Trade and Taxes compared with what these Taxes may amount to after the Union. With some Reasons why (if we enter in an Union,) our Trade should be under our own Regulations. [By Daniel De Foe?] London, 1706.

Proposals for a very Easie Tax to raise between Two and Three Millions of Money per Annum, (if not a greater Sum) in the room of the Land-Tax, to begin to pay the Publick Debts, and to discharge this Nation not only from all those Taxes that these Two late expensive Wars have loaded Us with, but from all other Taxes that are paid to Her Majesty, in a few years' time, with other happy Consequences, that will accrue to the Kingdom in general, if it should be laid on and continu'd. Also Proposals for the further Encouraging the Woollen-Manufactures of this Kingdom in foreign Parts. [By Ephraim Parker.] London, 1713.

A Proposal for the Payment of the Publick Debts, and an Account of some Things mentioned in Parliament on that Occasion. London, 1714.

A Letter to a Member of Parliament, shewing the Justice of a more equal and impartial Assessment on Land: the Sacredness of Publick Engagements: the Advantages of lowering the Customs and high Duties on Trade: and the Ease of reducing by Degrees the Debts of the Nation. [By William Wood?] London, 1717.

Fair Payment no Spunge: or some Considerations on the Unreasonableness of Refusing to receive back Money lent on Publick Securities. And the Necessity of Setting the Nation Free from the Insupportable Burthen of Debt and Taxes. London, 1717.

The State and Condition of our Taxes considered; or a Proposal for a Tax upon Funds: shewing the Justice, Usefulness, and Necessity of such a Tax, in respect to our Trading and Landed Interest, etc. By a Freeholder. [By William Wagstaffe?] London, 1714.

Animadversions and Observations upon a Treatise entituled Some Calculations and Remarks relating to the present State of the publick Debts and Funds. . . . by Archibald Hutcheson . . . to which is added a New Proposition to raise Money for the Use of the Publick. Humbly submitted to the Consideration of both Houses of Parliament, etc. London, 1718.

The Grasiers' Complaint and Petition for Redress: or the Necessity of Restraining Irish Wool and Yarn; and of Raising and Supporting the Price of Wool of the Growth of Great Britain consider'd. By a Lincolnshire Grasier. London, 1726.

A Letter to a Country Gentleman on the Revenue of the Salt Duty. London, 1732.

A Letter to a Freeholder on the Late Reduction of the Land Tax to One Shilling in the Pound. By a Member of the House of Commons. London, 1732.

A Scheme plainly demonstrating how several Hundred Thousand Pounds may be rais'd Yearly to the Government without officers to collect it, without oppression to the Poor, without hurting Trade and without any

Person's being oblig'd to pay it, but when he pleases so to do, etc. [By Thomas Downes of St. Albans.] London, 1732.

The Case of the Revival of the Salt Duty fully stated and considered with some Remarks on the Present State of Affairs, in answer to a late Pamphlet intitled a Letter to a Freeholder on the Reduction of the Land Tax to one Shilling in the Pound. In a Letter from a Member of the House to a Gentleman in the Country. [By William Pulteney.] London, 1732.

The Case of the Salt-Duty and Land-Tax offered to the Consideration of every Freeholder. London, 1732.

The Genuine Thoughts of a Merchant; shewing, that in all the Libels, Remonstrances, and pretended Letters, against a new Method of levying the Duties on Wine and Tobacco, there is not so much as one word worth answering. London, 1732–1733.

The Occasional Monitor: containing a Scheme or Proposal for taking off the several Taxes on Land, Soap, Starch, Candles, Leather, Plate, etc. and replacing the said Duties by another Tax, which will bring in more Money in a more Easy and Equal Manner and less burthensome to the Subject. Part II. London, 1732.

A candid Answer to a Letter from a Member of Parliament to his Friends in the Country concerning the Duties on Wine and Tobacco. London, 1733.

A Dialogue between Sir Andrew Freeport and Timothy Squart, on the subject of Excises: being a full Review of the whole dispute concerning a Change of the Duties on Wine and Tobacco. London, 1733.

A Letter from a Member of Parliament for a Borough in the West, to a Noble Lord in his Neighborhood there, concerning the Excise-Bill and the Manner and Causes of losing it. London, 1733.

A Letter from a Member of Parliament to his Friends in the Country concerning the Duties on Wine and Tobacco. London, 1733.

A Letter from a Merchant of London to a Member of Parliament, in answer to a Letter from a Member of Parliament to his Friends in the Country, concerning the Duties on Wine and Tobacco. London, 1733.

A Letter from the Mayor of the antient Borough of Guzzle-Down to Sir Francis Wronghead, their R—ve in P—t, in Answer to his Letter of the 19th of Feb., 1732. London, 1733.

A Letter to the Freeholders of Great Britain. London, 1733.

An Answer to the Considerations occasioned by the Craftsman upon Excise, so far as it relates to the Tobacco Trade. London, 1733.

An Appeal to the Landholders concerning the Reasonableness and General Benefit of an Excise upon Tobacco and Wine. London, 1733.

An Impartial Enquiry into the Present Question concerning Excise, in which the advantages arising to the King and Subject from raising Duties by Excise are demonstrated and the Objections thereto obviated. London, 1733.

A Review of the Excise Scheme; in answer to a Pamphlet, intitled the Rise and Fall of the late projected Excise, impartially considered. [By William Pulteney?] London, 1733.

A Word to the Freeholders and Burgesses of Great Britain, being Seasonable and serious Remarks upon the Inconsistent Conduct of certain Boroughs, in sending Instructions to their Representatives to oppose the Excise Bill, and yet re-electing them after their being rewarded with Places for voting for the same. London, 1733.

Considerations occasioned by the Craftsman upon Excises. London, 1733.

Englishmen's Eyes open'd: or all made to See, who are not resolved to be Blind: Being the Excise Controversy set in a new Light; completely discussed upon the just Principles of Reasoning, and brought to a fair and demonstrative Conclusion: between a Landlord and a Merchant. London, 1733.

Excise: being a Collection of Letters etc. containing the Sentiments and Instructions of the Merchants, Traders, Gentry and Inhabitants of the principal Cities, Counties, Towns and Boroughs in England to their Representatives in Parliament. London, 1733.

Reflections upon a Pamphlet entitled Observations upon the Laws of Excise. London, 1733.

Some General Considerations concerning the Alteration and Improvement of Publick Revenues. [By Sir Robert Walpole.] London, 1733.

Some Observations on National Treaties etc. An impartial Inquiry into the present Question concerning Excise, in which the Advantages arising to the King and Subject from raising Duties by Excise are demonstrated and the Objections thereto obviated. London, 1733.

Some Observations upon a Paper intituled, The List. That is, of those who Voted for and against the Excise-Bill. London, 1733.

Some seasonable Animadversions on Excises occasioned by a Pamphlet lately published, entitled: Considerations occasioned by the Craftsman. London, 1733.

The Budget opened; or an Answer to a Pamphlet intitled A Letter from a Member of Parliament to his Friends in the Country, concerning the Duties on Wine and Tobacco. London, 1733.

The Golden Fleece. To which is added, a Proposal for taking away many burthensome Duties on some of the most essential Necessaries in Life, viz. Leather, Soap, Candles, &c. London, 1733.

The Nature of the Present Excise, and the Consequences of its farther Extension examined. In a Letter to a Member of Parliament. London, 1733.

The Norfolk Scheme: or a Letter to William Pulteney, Esq.; on the Present Posture of Affairs, particularly with Relation to the Scheme for altering the Method of Collecting the Revenues, by converting the Customs into Excises, etc. London, 1733.

The Reply of a Member of Parliament to the Mayor of his Corporation. London, 1733.

The Rise and Fall of the late Projected Excise impartially consider'd. By a Friend to the English Constitution. London, 1733.

The Vintner and Tobacconist's Advocate, being Remarks upon, and a Full Answer to those Scandalous Papers published in The Daily Courant, under the title of The Occasional Financier, and under the Names of Carus and Meanwhile. London, 1733.

A Vindication of the Conduct of the Ministry, in the scheme of the Excise on Wine and Tobacco, . . . with a General Examination of the Reasons . . . ; the Consequences and Events it would have had. London, 1734.

The late Excise Scheme dissected: or, an exact copy of the late Bill for Repealing several Subsidies and an Impost, now payable on Tobacco &c. with all the Blanks filled up . . . ; and proper observations on each Paragraph. [By William Pulteney.] London, 1734.

The Sugar Trade, with the Incumbrances thereon laid open. By a Barbadoes Planter. [John Ashley.] London, 1734.

Some Observations on a direct Importation of Sugar from the British Islands. [By John Ashley.] London, 1735.

Britannica in Mourning: or a Review of the Politicks and Conduct of the Court of Great Britain, with Regard to France, the Ballance of Power and the true Interest of these Nations, etc. In a Dialogue between two ancient Patriot Englishmen, commonly known by the names of Jest and Earnest. London, 1742.

Serious Considerations on the several High Duties which the Nation in general (as well as its Trade in particular) labours under: with a Proposal for preventing the Running of Goods, discharging the Trader from any Search, and raising all the Publick Supplies by one Single Tax. By a Well-Wisher to the Good People of Great Britain. [Sir Matthew Decker.] London, 1743.

The Axe (once more) Laid to the Root of the Tree. Published for the Universal Benefit of Mankind and dedicated to the Landholders of the British Dominions. By a Friend to Truth and the Christian Religion. *A Supplement on Taxes in General on British Sugar.* London, 1743.

The State of our Wool and Woollen Trade Review'd. Wherein some Objections to the Grasier's Advocate are consider'd, etc. London, 1743.

An Essay on the Causes of the Decline of the Foreign Trade, consequently of the Value of Lands of Britain and on the Means to Restore Both. [By Richardson or Decker.] Begun in the Year 1739. London, 1744.

A Serious Address to the Proprietors of the Publick Funds, occasion'd by several late Schemes for Reducing their Interest or Subjecting them to Taxes, in which the Rights of Publick Creditors are explained and asserted, their just Claim . . . to an Exemption from Taxes fully demonstrated, etc. Humbly submitted to the Consideration of the Members of the House of Commons. London, 1744.

Considerations against laying any New Duty upon Sugar, wherein is particularly shewn That a New Imposition will be ruinous to the Sugar Colonies, insufficient for the Purposes intended, and greatly conducive to the Aggrandizement of France. London, 1744.

Pro Commodo Regis et Populi. Publick Funds for Publick Service by raising Three Millions of Money, or a Million and a Half, with Ease and Ability, without Charge of Collecting, or affecting Land or Trade, or burdening Tax upon Tax. In an Appeal to the Impartial and Common Understanding of all Mankind. London, 1744.

Considerations relating to the laying any additional Duty on Sugar from the British Plantations, wherein is shown that such Duty will be injurious to the Commerce and Navigation of this Kingdom, ruinous to our Sugar Colonies, beneficial to those of France, and insufficient for the Purposes intended. London, 1747.

The State of the Sugar Trade; shewing the Dangerous Consequences that must attend any additional Duty therein. London, 1747.

A short View of the Prejudice arising both to the Country and Revenue from the Imposition on Ale and Beer granted to the City of Edinburgh and other Boroughs in Scotland humbly submitted to the Consideration of the Proprietors and Farmers of Land, etc. Edinburgh, 1748.

Ill-Judged Bounties tend to Beggary on both Sides: or Observations on a Paper intituled Reasons for laying a Duty on French and Spanish Indico and granting a Bounty on what is made in the British Plantations. London, 1748.

Reasons grounded on Facts shewing that a new Duty on Sugar must fall on the Planter, and that a new Duty will not certainly encrease the Revenue. London, 1748.

Considerations upon a Reduction of the Land Tax. [By Robert Nugent.] London, 1749.

A Brief Essay on the Advantages and Disadvantages which respectively attend France and Great Britain with Regard to Trade. An Appen-

dix containing a Plan for raising one only Tax on the Consumers of Luxuries. [By Josiah Tucker.] London, 1750.

An Appeal to the Public in relation to the Tobacco . . . and a Revival of the old Project to establish a General Excise. London, 1751.

Further Considerations upon a Reduction of the Land-Tax: together with a State of the Annual Supplies of the Sinking-Fund and of the National Debt at various future Periods, and in various Suppositions. [By Robert Nugent.] London, 1751.

Remarques sur les Avantages et les Désavantages de la France et de la grande Bretagne par rapport au Commerce et aux autres Sources de la Puissance des États. Traduit de l'Anglois du Chevalier John Nickolls. [By Dangeul, Marquis de Plumart.] Leyde et Paris, 1754.

Some Observations on the Bill intitled an Act for granting to his Majesty an Excise upon Wines and Spirits distilled, sold by Retail or consumed within this Province, and upon Limes, Lemons and Oranges. Boston, 1754.

The Crisis. [By Dr. Samuel Cooper.] n. p. [Boston], 1754.

The Monster of Monsters, a true and faithful Narrative of a most remarkable Phænomenon, which lately made its Appearance in this Metropolis to the Surprize and Terror of all his Majesty's Good Subjects. Dedicated to all the Virtuosi of New England. Boston, 1754.

Essai sur la Nature du Commerce en général. Traduit de l'Anglois. [Par R. Cantillon.] Londres, 1755.

A Letter from a Member of Parliament on the Plate Tax. London, 1756.

Calculations of Taxes for a Family of Each Rank, Degree or Class for one year. [By Joseph Massie.] London, 1756.

A Letter to Bourchier Cleeve, Esq., concerning his Calculations of Taxes. [By Joseph Massie.] London, 1757.

Proposals for carrying on the War with Vigour, raising the Supplies within the Year and forming a National Militia. To which are added Considerations in Respect to Manufactures and Labourers, and the Taxes paid by them; the Inconveniences of Credit for small Sums, and the Courts lately erected to recover them. Intended to demonstrate, that it is not the Dearness of the Labour of the Poor, but the Profits and Expenses of higher Classes of People, which are the real Clog on the Foreign Trade and Commerce of England. London, 1757.

The Proposal, commonly called Sir Matthew Decker's Scheme for one General Tax upon Houses, laid open; and shewed to be a deep concerted Project to traduce the Wisdom of the Legislatures; disquiet the Minds of the People; and ruin the Trade and Manufacturies of Great Britain. [By Joseph Massie.] London, 1757.

Reasons humbly offered against laying any further British Duties on Wrought Silks of the Manufacture of Italy, the Kingdom of Naples and Sicily, or Holland: shewing the probable Ill Consequences of such a Measure in regard to the Landed Interest, Woollen Manufacturies, Silk Manufacturies, Fisheries, Wealth and Naval Power of Great Britain. [By Joseph Massie.] London, 1758.

The Case of the Five Millions fairly stated in regard to Taxes, Trade, Law, Lawyers, etc. Addressed to the Guardians of our Liberty. London, 1758.

Thoughts on the pernicious Consequences of borrowing Money. London, 1759.

Doutes proposés à l'Auteur de la Théorie de l'Impôt. Paris, 1761.

An Address to such of the Electors of Great Britain as are not makers of Cyder and Perry. By the Representative of a Cyder-County. London, 1763.

Observations on the new Cyder-Tax, so far as the same may affect our Woollen Manufacturies, Newfoundland Fisheries, etc. [By Joseph Massie.] London, 1764.

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(For fourth edition)

A. Signed Works

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